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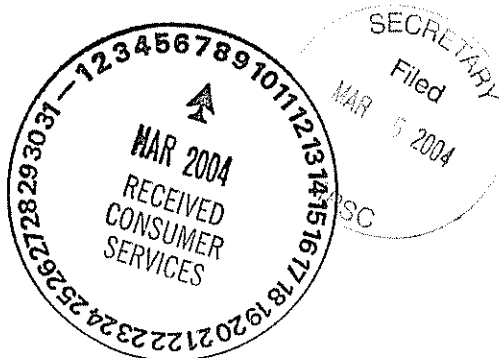
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March 5, 2004

**VIA HAND DELIVERY**

Walter Thomas, Secretary  
Alabama Public Service Commission  
RSA Union Building, 8<sup>th</sup> Floor  
100 North Union Building  
Montgomery, Alabama 36104

**RE: Docket Number: 29054**



Dear Mr. Thomas:

Enclosed please find the Notice of Filing Proprietary Rebuttal Testimony Under Seal and Notice of Filing Redacted and/or Non-Proprietary Rebuttal Testimony to be filed in the above-referenced case.

Should you have any questions regarding this matter, please advise. Your assistance in this matter is greatly appreciated.

Sincerely,

Robert E. Poundstone IV

REP:brr  
enclosures

**ALABAMA PUBLIC SERVICE COMMISSION**

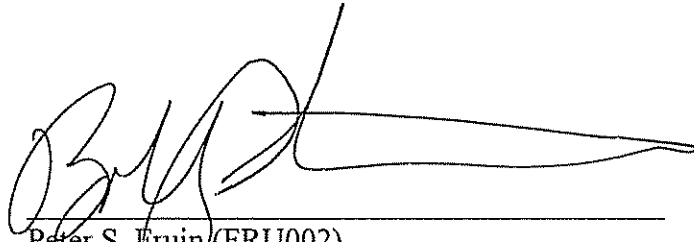
<b>IN RE: Implementation of the Federal</b>	)	
<b>Communications Commission's Triennial</b>	)	<b>Docket No. 29054</b>
<b>Review Order (Phase II - Local Switching</b>	)	
<b>for Mass Market Customers)</b>	)	

**NOTICE OF FILING PROPRIETARY REBUTTAL TESTIMONY**  
**UNDER SEAL AND NOTICE OF FILING REDACTED**  
**AND/OR NON-PROPRIETARY REBUTTAL TESTIMONY**

COME NOW MCImetro Access Transmission Services, LLC and MCI Worldcom Communications, Inc. (collectively referred to herein as "MCI") and hereby file this notice of filing the rebuttal testimony which is attached hereto. MCI states that it is filing testimony containing proprietary testimony under seal and that it is filing testimony that has been redacted so as not to contain proprietary information, and/or which otherwise contains no proprietary information, for public access. Specifically, MCI is filing herewith the following testimony:

1. Attached hereto as *Exhibit A* and being filed under seal, is the rebuttal testimony of Dr. Mark T. Bryant which contains proprietary/confidential information.
2. Attached hereto as *Exhibit B* and being filed for public access is the rebuttal testimony of Dr. Mark T. Bryant with proprietary/confidential information redacted.
3. Attached hereto as *Exhibit C* and being filed under seal, is the rebuttal testimony of James Webber which contains proprietary/confidential information.
4. Attached hereto as *Exhibit D* and being filed for public access is the rebuttal testimony of James Webber with proprietary/confidential information redacted.
5. Attached hereto as *Exhibit E* is the testimony of Sherry Lichtenberg which does not contain proprietary and/or confidential information and which is being filed for public access.

Respectfully submitted this 5th day of March 2004.

A handwritten signature in black ink, appearing to read 'P. Fruin', with a long horizontal stroke extending to the right.

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**CERTIFICATE OF SERVICE**

I hereby certify that I have this date served a copy of the foregoing document on the following by placing same in the United States Mail, postage prepaid and properly address on this the 5<sup>th</sup> day of March 2004.

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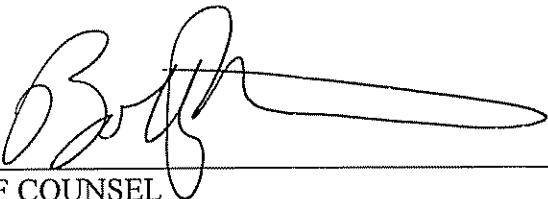
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\_\_\_\_\_  
OF COUNSEL

**BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION**

**In Re: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Circuit Switching)** )  
 )  
 ) **Docket No. 29054**  
 )

## REBUTTAL TESTIMONY OF DR. MARK T. BRYANT

On Behalf Of

MCIMETRO ACCESS TRANSMISSION SERVICES, LLC

And

MCI WORLDCOM COMMUNICATIONS, INC.

March 5, 2004

**NON-PROPRIETARY VERSION**

**CONFIDENTIAL DATA REDACTED**

# EXHIBIT

B

1     **Q.     PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2     A.     My name is Mark T. Bryant, and my business address is 4209 Park  
3             Hollow Court, Austin, Texas.

4     **Q.     ARE YOU THE SAME MARK T. BRYANT WHO PREVIOUSLY**  
5             **FILED DIRECT TESTIMONY IN THIS PROCEEDING?**

6     A.     Yes, I am.

7     **Q.     WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

8     A.     The purpose of my rebuttal testimony is to respond to the direct testimony  
9             of BellSouth witnesses Pleatsikas, Tipton, Stegeman, and Aron.

10    **I.     *REBUTTAL OF THE TESTIMONY OF DR. PLEATSIKAS***

11    **Q.     DO YOU AGREE WITH THE ROLE OF MARKET DEFINITION**  
12             **IN DETERMINING THE DEGREE OF ACTUAL COMPETITION**  
13             **FOR LOCAL EXCHANGE SERVICE (THE “TRIGGERS”**  
14             **ANALYSIS) AND IN DETERMINING THE POTENTIAL FOR**  
15             **CLEC SWITCH DEPLOYMENT IN ALABAMA AS OUTLINED**  
16             **BY DR. PLEATSIKAS?**

17    A.     In general, yes. In discussing the role of market definition, Dr. Pleatsikas  
18             correctly notes that the market definition should permit a granular analysis  
19             and should reflect cost or other differences that might affect a competitor’s  
20             ability to provide service and that the market should be defined in such a

1 way as to reveal differences in markets that would result in differing  
2 findings of impairment. Dr. Pleatsikas also correctly identifies some of the  
3 cost differences that have an impact on a CLEC's decision to offer UNE-L  
4 based local exchange service.

5 **Q. DO YOU AGREE WITH DR. PLEATSIKAS' CONCLUSION THAT**  
6 **A MARKET DEFINITION OF UNE RATE ZONES DIVIDED BY**  
7 **COMPONENT ECONOMIC AREAS ADEQUATELY CAPTURES**  
8 **THE FACTORS THAT AFFECT A CLEC'S DECISION TO OFFER**  
9 **UNE-L BASED SERVICE?**

10 A. No, I do not. Among the factors cited by Dr. Pleatsikas to support his  
11 proposed market definition are the differences in rates for UNE loops and  
12 the cost of transport from customers' locations to the CLEC's switch.  
13 While Dr. Pleatsikas' market definition captures the differences in  
14 recurring rates for UNE loops and other ILEC rate elements, it fails to  
15 adequately capture the effect that the cost of transport and the costs  
16 imposed by other ILEC charges may have on a CLEC's decision to enter  
17 the market as a UNE-L based local service provider.

18 **Q. IN WHAT WAY DOES DR. PLEATSIKAS' MARKET**  
19 **DEFINITION FAIL TO ADEQUATELY ADDRESS THE EFFECT**  
20 **OF THE COST OF TRANSPORT?**

21 A. The rates charged by BellSouth for transport rate elements vary by  
22 distance as well as by rate zone. As a result, providing service at a wire

1 center that is located further from a CLEC's switch is more costly to the  
2 CLEC than serving a wire center that is close to the CLEC's switch.  
3 Failure to recognize this cost differential in effect averages transport costs  
4 across all wire centers in BellSouth's proposed markets. While the market  
5 as a whole might be profitable under Dr. Pleatsikas' market definition, the  
6 potential exists that some wire centers within the proposed market would  
7 be unprofitable to serve. If a market as broad as a CEA is defined,  
8 differences in profitability in wire centers will be obscured, and the  
9 impairment analysis will thus fail to capture any areas where the CLECs  
10 cannot profitably provide service.

11 **Q. WHAT OTHER CLEC COSTS VARY AMONG WIRE CENTERS?**

12 A. There are a number of cost factors that vary among wire centers. These  
13 include the number of addressable lines in the wire center, the number of  
14 lines for which the CLEC is capable of offering DSL services, the number  
15 of lines in the wire center served by digital loop carrier technology, the  
16 relative number of business and residential customers in the wire center,  
17 and the demographics of customers served from the wire center.

18 **Q. HOW DOES THE NUMBER OF ADDRESSABLE LINES IN THE**  
19 **WIRE CENTER AFFECT THE CLEC's COSTS?**

20 A. The number of addressable lines in the wire center affects the CLEC's  
21 ability to recover the substantial fixed cost associated with establishing a  
22 collocation in the wire center. Some of these costs are in the form of ILEC

1 nonrecurring charges for the establishment of the collocation, and other  
2 are in the form of CLEC capital expenditures for equipment to be located  
3 in the collocation space, and the cost of installing and configuring the  
4 equipment. The fewer the number of lines that are served from a particular  
5 wire center, the fewer the number of potential CLEC customers over  
6 which these costs may be spread, and thus the higher the CLEC's per-  
7 customer cost will be.

8 **Q. HOW DOES THE NUMBER OF LINES SERVED BY DIGITAL**  
9 **LOOP CARRIER AFFECT THE CLEC'S PROFITABILITY?**

10 A. The use of digital loop carrier technology affects CLEC profitability in  
11 two ways. First, under the terms of the FCC's Triennial Review Order, the  
12 ILEC is not obligated to provide unbundled access to the packet switching  
13 capability of hybrid fiber-copper loops. This provision of the order  
14 effectively precludes the CLEC from offering DSL services to those  
15 customers whose loops are provisioned using DLC technology. This  
16 reduces the revenue potentially available to the CLEC in the wire center to  
17 recover its fixed costs. It also may reduce the market share that the CLEC  
18 is capable of achieving, particularly among the higher-spending residential  
19 customers and business customers, who are more likely to demand  
20 broadband data services.

21 Second, the use of digital loop carrier technology, and particularly  
22 next-generation DLC systems, complicates the process of unbundling

1 loops for use by the CLEC. As explained in the testimony of Mr. Webber,  
2 the methods proposed thus far for unbundling of loops provided over  
3 digital loop carrier systems either are not yet tested, or result in significant  
4 quality of service or cost issues for CLECs.

5 **Q. IN WHAT WAYS DO THE PROPORTION OF BUSINESS AND**  
6 **RESIDENCE CUSTOMERS AND THE DEMOGRAPHIC**  
7 **CHARACTERISTICS OF CUSTOMERS IN THE WIRE CENTER**  
8 **AFFECT CLEC PROFITABILITY?**

9 A. Each of these factors affects the revenue that is potentially available to the  
10 CLEC in each wire center. Because business customers generally produce  
11 more revenue than residential customers under current pricing practices, a  
12 larger proportion of business customers means a larger potential revenue  
13 stream for the CLEC. Likewise, the demographic characteristics of the  
14 wire center may affect the potential revenue available to the CLEC. A  
15 wire center with a large proportion of affluent customers, or a wire center  
16 with a large proportion of younger, more tech-savvy customers will likely  
17 generate more revenue per customer than wire centers without these  
18 characteristics.

19 **Q. IS THERE EVIDENCE IN THE TRO THAT THE FCC**  
20 **CONSIDERED WIRE CENTERS TO BE AN APPROPRIATE UNIT**  
21 **OF ANALYSIS?**

1     A.     Yes, in paragraph 484 of the *Triennial Review Order*, the FCC reviewed  
2           the evidence that had been provided by parties to the proceeding on CLEC  
3           profitability:

4                     ...we observe that all of the studies mentioned – including the  
5                     BOC studies – suggest that it would be uneconomic for a  
6                     competing carrier to serve customers in smaller wire centers. All  
7                     the studies found that in such wire centers, entry would be much  
8                     more expensive for the CLEC than for the incumbent, or simply  
9                     would be uneconomic.

10

11    **Q.     WAS ONE OF THE STUDIES REFERENCED BY THE FCC**  
12           **PRESENTED BY BELL SOUTH?**

13    A.     Yes. In fact, the FCC cited a study presented by BellSouth in the same  
14           paragraph that purportedly calculated the profitability of CLECs in wire  
15           centers of various sizes:

16                     BellSouth found that for wire centers of under 5,000 lines, a  
17                     competitor would likely experience a net loss of \$1.93 per line  
18                     assuming BellSouth's average retail local revenues.

19           BellSouth itself apparently considered wire center size to be a significant  
20           determinant of CLEC profitability, as is evidenced by its presentation of  
21           profitability estimate for various categories of wire center size.

22    **Q.     ARE ANY OF THE WIRE CENTERS IN THE BELL SOUTH-**  
23           **DEFINED MARKETS FOR WHICH BELL SOUTH CLAIMS**  
24           **THAT CLECs ARE NOT IMPAIRED SMALLER THAN 5,000**  
25           **LINES?**

1     A.     Yes. If the Commission were to accept BellSouth's proposed market  
2           definition and non-impairment claims, 23 wire centers of fewer than 5,000  
3           lines — fourteen percent of all wire centers in the markets found non-  
4           impaired by BellSouth — would be found to be not impaired. These are  
5           wire centers that, according to BellSouth's own earlier analysis, cannot be  
6           profitably served by CLECs.

7                     Clearly, BellSouth's proposed market definition obscures  
8           important factors that influence a CLEC's decision to provide service. If  
9           the Commission were to adopt the market definition proposed by Dr.  
10          Pleatsikas, there is a risk that customers in smaller wire centers could be  
11          left without competitive alternatives.

12    **Q.     DR. PLEATSIKAS HAS ARGUED THAT A WIRE CENTER**  
13           **MARKET DEFINITION DOES NOT CAPTURE THE**  
14           **ECONOMIES OF SCALE THAT PERTAIN TO CERTAIN COSTS**  
15           **INCURRED BY THE CLEC IN PROVIDING SERVICE. DO YOU**  
16           **AGREE?**

17    A.     Yes, I agree that certain costs that the CLEC will incur in providing local  
18           exchange service using its own switching facilities are not specific to the  
19           wire center. Examples would include the fixed cost purchasing and  
20           installing switching and signaling facilities, and the development of billing  
21           and provisioning systems. The question, however, is whether  
22           consideration of the economies of scale that pertain to these cost factors

1 should rule out consideration of the cost differentials that exist between  
2 wire centers. I believe that both wire center specific costs and costs that  
3 are incurred over a broader area are important considerations for a CLEC  
4 considering offering local exchange service using its own switching  
5 facilities. However, because the costs of switching, and billing and  
6 provisioning systems are incurred on behalf of a relatively much larger  
7 pool of customers over which the costs may be spread, they are a less  
8 important factor in the entry decision than wire center specific fixed costs,  
9 which must be spread over a relatively much smaller number of  
10 customers.

11 To illustrate this point, I have attached a chart as Exhibit MTB-4.  
12 This chart illustrates the investment per customer for a local exchange  
13 switch, with the assumption that the fixed investment for the switch is  
14 \$1,000,000, and the per customer investment is \$100. As the chart clearly  
15 shows, the economies of scale in the switch are achieved fairly rapidly. By  
16 the time the CLEC is serving a few thousand customers, the rate of decline  
17 in the per-customer investment has slowed dramatically, and adding  
18 additional customers results in a miniscule decrease in the per customer  
19 investment.

20 **II. REBUTTAL OF THE DIRECT TESTIMONY OF MS. TIPTON**  
21 **(TRIGGERS)**

22 **Q. MS. TIPTON STATED IN HER DIRECT TESTIMONY THAT THE**  
23 **"TRIGGERS" ANALYSIS IS A SIMPLE COUNTING EXERCISE –**

1           **ONCE THE COMMISSION HAS DETERMINED THAT THREE**  
2           **CARRIERS ARE PROVIDING LOCAL SERVICE TO MASS**  
3           **MARKET CUSTOMERS, IT NEED LOOK NO FURTHER. DO**  
4           **YOU AGREE?**

5       A.     Only in part. To be sure, once the Commission has determined which sort  
6           of carriers are suitable for inclusion in the counting exercise, the counting  
7           itself is a simple process. The more challenging aspect of the decision that  
8           the Commission faces is in determining which carriers may appropriately  
9           be counted. The FCC has identified a number of factors that must be  
10          considered in this determination. These include:

- 11                   (1) Corporate ownership;  
12                   (2) Active and continuing market participation;  
13                   (3) Intermodal competition; and  
14                   (4) Scale and scope of market participation.

15          I discuss each of these rules, and other pertinent considerations, below. To  
16          aid the Commission in reviewing evidence that purports to show that  
17          either the retail or wholesale trigger has been met in a particular market, I  
18          have also prepared a flowchart that summarizes the requisite analysis. This  
19          flowchart is attached as Exhibit MTB-5 to my testimony.

1     **Q.     WHAT ARE THE FCC’S RULES WITH RESPECT TO**  
2     **CORPORATE OWNERSHIP?**

3     A.     The FCC has imposed two separate restrictions on corporate ownership.  
4           First, a carrier can only count toward the retail or wholesale trigger in a  
5           particular market if that carrier is unaffiliated with the incumbent.  
6           *Triennial Review Order*, ¶ 499. Second, to prevent “gaming,” carriers  
7           affiliated with one another, but not the incumbent, only count as a single  
8           carrier toward satisfying the pertinent trigger. *Id.* (In both instances, the  
9           FCC relied on a definition of affiliation found in Section 3 of the Act (47  
10          U.S.C. § 153(1)). *Id.*, n. 1550). These two requirements appear as the  
11          second and third items on the flowchart in Exhibit MTB-5.

12    **Q.     WHAT ARE THE FCC’S RULES WITH RESPECT TO A**  
13    **POTENTIAL TRIGGERING CARRIER’S ACTIVE AND**  
14    **CONTINUING MARKET PARTICIPATION?**

15    A.     The FCC stresses that potential triggering carriers must be “actively  
16           providing voice service to mass market customers in the market.” *Id.*, ¶  
17           499. Moreover, the state commission must verify that the competitors in  
18           question have not, for example, filed a notice to terminate service in that  
19           market (*Id.*, n. 1556) or provided other evidence demonstrating that they  
20           no longer intend to be an active participant in that market. These  
21           requirements are reflected in the fourth item in the flowchart in Exhibit  
22           MTB-5.

1           The clear intent of these rules is to ensure that any company  
2           counted toward a trigger is an active and continuing participant in the  
3           relevant market. To give these rules economic meaning, the Commission  
4           should require evidence that any company counted toward a trigger is  
5           actively soliciting new customers and has, in fact, added new customers *in*  
6           *that market* within the recent past (*e.g.*, the most recent month for which  
7           data are available).

8   **Q.   WHAT ARE THE FCC'S RULES WITH RESPECT TO**  
9   **INTERMODAL COMPETITION?**

10   A.   The FCC requires states to consider whether intermodal alternatives are  
11           comparable in “cost, quality and maturity” to the incumbent’s switched  
12           mass-market voice services before counting such alternatives toward the  
13           trigger in any market. *Id.*, n. 1549. *See also* ¶ 97. Based on these criteria,  
14           the FCC specifically indicated that it did not expect states to count CMRS  
15           carriers toward either trigger. *Id.*, n. 1549. The FCC defines CMRS  
16           carriers as “any mobile service, as defined in section 3 of the Act, as  
17           amended, provided for profit and making interconnection services  
18           available to the public.” *Id.*, n. 164, citing 47 U.S.C. § 332(d)(1). This  
19           definition includes, but is not limited to, traditional cellular carriers.  
20           Similarly, the FCC indicated that fixed wireless has “not proven to be  
21           viable or deployable on a mass market scale,” implying that fixed wireless  
22           services do not meet the “comparable in cost, quality and maturity”  
23           standard for inclusion in the trigger analysis. *Id.*, ¶ 310. The FCC did,

1           however, leave open the option of counting carriers that use packet  
2           switches or soft switches to provide voice services to mass-market  
3           customers. *Id.*, n. 1549.

4           To give economic meaning to these rules, I recommend that the  
5           Commission place the burden of proof on the ILECs to demonstrate that  
6           any intermodal alternative it proposes to count toward the triggers satisfies  
7           the “comparable in cost, quality and maturity” standard identified in  
8           footnote 1549 to the *Triennial Review Order*. I have therefore included as  
9           the fifth item in the Exhibit MTB-5 flowchart an evaluation of the  
10          incumbent’s showing as to the cost, quality and maturity of any intermodal  
11          providers proffered as potential triggering companies.

12   **Q.    SHOULD CABLE TELEPHONY PROVIDERS BE CONSIDERED**  
13   **POTENTIAL MASS-MARKET TRIGGERING COMPANIES?**

14   A.    No. As the FCC acknowledged, cable telephony fails to serve the “crucial  
15          function” of affording access to the incumbent’s loops, (*Id.*, ¶ 439) and  
16          therefore “provides no evidence that competitors have successfully self-  
17          deployed switches as a means to access the incumbents’ local loops, and  
18          have overcome the difficulties inherent in the hot cut process.” *Id.*, ¶ 440.  
19          Cable telephony’s strategy is to “bypass the incumbent LECs’ networks  
20          entirely.” *Id.* This strategy is only available to a single firm in any market  
21          because cable TV companies, due to “unique economic circumstances of  
22          first-mover advantages and scope economies, have access to customers  
23          that other competitive carriers lack.” *Id.*, ¶ 310. As a result, neither cable

1       telephony nor CMRS “can be used as a means of accessing the  
2       incumbents’ wireline voice-grade local loops. . . . . Accordingly, neither  
3       technology provides probative evidence of an entrant’s ability to access  
4       the incumbent ILEC’s wireline voice-grade local loop and thereby self-  
5       deploy local circuit switches.” *Id.*, ¶ 446. Any competitive facilities that  
6       allow access to some customer locations but not others clearly cannot be  
7       regarded as probative evidence of no impairment concerning those  
8       customer locations that cannot be reached by the competitive facilities.  
9       Cable telephony is at most an alternative to the ILEC’s local voice service  
10      for the specific customer locations served via the cable company’s  
11      facilities, which typically do not reach all of the ILEC’s mass-market  
12      customer locations. (For example, cable facilities frequently do not serve  
13      the central business districts in which many mass-market small business  
14      customers may be located. *Id.*, n. 1349.)

15             For similar reasons, the FCC determined that the availability of  
16      cable telephony does not eliminate impairment with respect to the ILEC’s  
17      voice-grade loop facilities. *Id.*, ¶¶ 228, 229 and 245. Because cable  
18      telephony offers an alternative to the ILEC’s mass-market switching  
19      facilities only where it also offers an alternative to the ILEC’s loop  
20      facilities, it logically follows that cable telephony does not cure  
21      impairment with respect to mass-market switching, either.

22             In addition, cable telephony does not unambiguously fulfill the  
23      “cost, quality and maturity” criteria established by the FCC. Cable

1       telephony services (particularly the recent variants provided using Voice  
2       over Internet Protocol, or VoIP, technology) are relatively new; it is not  
3       yet clear whether most consumers perceive such services to be comparable  
4       to local telephone service, especially with respect to reliability issues such  
5       as E-911 and backup power in emergencies. Thus, I believe that a  
6       reasoned analysis disqualifies cable telephony from being considered as a  
7       “close enough” substitute for the ILEC’s local voice services to be  
8       included in the product market for the mass-market switching impairment  
9       analysis.

10    **Q.   WHAT SCALE AND SCOPE OF MARKET PARTICIPATION**  
11       **SHOULD BE REQUIRED BEFORE A CARRIER IS DEEMED A**  
12       **TRIGGER?**

13    A.   Competitive providers should be capable of providing service to  
14       substantially all customers in a defined market. This concept is implicit in  
15       virtually the entirety of the *Triennial Review Order*, in its focus on  
16       ensuring that customers have access to alternative providers of local  
17       exchange service. Indeed, the Commission’s focus on the “mass market”  
18       itself is nonsensical under any interpretation of the *Order* that would find  
19       non-impairment due to a very limited availability of competitive  
20       alternatives. Service to a few customers in a small portion of a geographic  
21       market does not reflect a carrier’s ability to actively serve the “mass  
22       market.” A key reason the FCC looked to actual marketplace evidence is  
23       that such evidence shows “whether new entrants, *as a practical matter*,

1 have surmounted barriers to entry in the relevant market.” TRO ¶ 93  
2 (emphasis added and deleted).

3  
4 In defining the evidence that it will consider in assessing the  
5 availability of competitive alternatives, the FCC stated in ¶ 94 of the  
6 *Triennial Review Order*:

7 As we examine the evidence of facilities deployment by  
8 competitive LECs in the specific UNE discussions, we will  
9 give it substantial weight, but we do not agree that we must  
10 find it conclusive or presumptive of a particular outcome  
11 without additional information or analysis. For example, if  
12 the marketplace evidence shows that new entrants have  
13 deployed a certain type of facility, we will consider the  
14 facts as evidence that the barriers to entry in that market for  
15 that element are surmountable. In deciding what weight to  
16 give this evidence, we will consider *how extensively*  
17 *carriers have been able to deploy such alternatives, to*  
18 *serve what extent of the market, and how mature and stable*  
19 *that market is*. Thus, while we agree that such evidence  
20 may indicate a lack of impairment, we disagree with  
21 commenters that argue that such evidence is dispositive or  
22 creates a rebuttable presumption of no impairment.

23  
24 (Emphasis added.) Thus, the FCC clearly is concerned that any evidence  
25 of facilities deployment be assessed in light of the extent of the market  
26 served and indicates that limited deployment is insufficient to support a  
27 finding of non-impairment. Thus, in eliminating consideration of CMRS  
28 as a triggering alternative, the FCC cited as one factor the lack of ubiquity  
29 of that service:

30 For example, we note that CMRS does not yet equal  
31 traditional incumbent LEC services in its quality, its ability  
32 to handle data traffic, *its ubiquity*, and its ability to provide  
33 broadband services to the mass market.  
34

1        *TRO* ¶ 499, n.1549 (emphasis added). If the ability to serve more than a  
2        few customers within a market were not a concern, the Commission would  
3        not have eliminated CMRS on the basis of its lack of ubiquity.

4                Finally, the FCC, in establishing requirements for consideration of  
5        retail and wholesale switch providers, stated that:

6                Moreover, the identified competitive switch providers  
7                should be actively providing voice service to mass market  
8                customers in the market. Identified carriers providing  
9                *wholesale* service should be actively providing voice  
10              service used to serve the mass market and be operationally  
11              ready and willing to provide wholesale service to all  
12              competitive providers in the designated market.

13        *TRO* ¶ 499. In a footnote to this paragraph, the FCC went further, in  
14        language that does not distinguish between retail and wholesale carriers, to  
15        state:

16              In circumstances where switch providers (or the resellers that rely  
17              on them) are identified as currently serving, or capable of serving,  
18              only part of the market, the state commission may choose to  
19              consider defining that portion of the market as a separate market  
20              for purposes of its analysis.

21        *TRO* ¶ 499, n.1552. If the FCC believes that portions of a market that are  
22        actively being served should be segregated from portions that cannot or  
23        are not being served, then it must also believe that the extent of the ability  
24        of competitors to provide service within a market is an important  
25        consideration.

26        **Q.        HOW SHOULD THE COMMISSION IMPLEMENT THE**  
27        **REQUIREMENT THAT A POTENTIAL TRIGGER COMPANY BE**

1           **CAPABLE OF PROVIDING SERVICE TO SUBSTANTIALLY ALL**  
2           **CUSTOMERS IN A DEFINED MARKET?**

3    A.    The Commission can achieve the same effect either by narrowing the  
4           market definition in such a way that the potential triggering companies do  
5           in fact offer services to all, or virtually all, customers within the defined  
6           market, or by declining to count companies that do not offer services to  
7           all, or virtually all, mass-market customers within the geographic market  
8           that the Commission adopts. Either approach accomplishes the essential  
9           economic purpose of applying triggers in a manner that ensures that all, or  
10          virtually all, customers within a given market have significant alternatives.

11   **Q.    WHY IS IT CONSISTENT WITH PUBLIC POLICY THAT**  
12          **TRIGGERS SHOULD BE APPLIED IN A WAY THAT ENSURES**  
13          **ALL, OR VIRTUALLY ALL, CUSTOMERS WITHIN A GIVEN**  
14          **MARKET HAVE SIGNIFICANT ALTERNATIVES?**

15   A.    First and foremost, such an approach is consistent with the pro-  
16          competitive goals of the Act and this Commission. To date, UNE-P has  
17          proven to be the most successful and widespread vehicle for providing  
18          mass-market customers with competitive alternatives to the incumbents'  
19          retail local exchange services. By its very nature, UNE-P allows  
20          competitors to offer alternatives to each and every customer that the ILEC  
21          serves. Eliminating access to unbundled switching is inherently anti-  
22          consumer unless the Commission can be very sure that *all* of the

1 customers who can be served via UNE-P can also be served through some  
2 alternative form of competitive entry.

3 **Q. IS IT YOUR TESTIMONY THAT THE ILEC MUST**  
4 **DEMONSTRATE THAT POTENTIAL TRIGGERING**  
5 **COMPANIES ARE CURRENTLY OFFERING RETAIL LOCAL**  
6 **EXCHANGE SERVICES TO (OR WHOLESALE SERVICES THAT**  
7 **ALLOW POTENTIAL RESELLERS TO REACH) EVERY SINGLE**  
8 **MASS-MARKET CUSTOMER IN A GIVEN WIRE CENTER?**

9 A. No. The Commission should, however, require evidence that: (1) each  
10 company counted toward the retail trigger has a demonstrated capability of  
11 holding itself out to provide retail local exchange service to all, or  
12 virtually all, mass-market customers within that wire center; and (2) the  
13 volumes at which the potential triggering company is presently providing  
14 service demonstrate that it has overcome the hot cut barrier to entry that is  
15 the basis for the national finding of impairment and all of the other  
16 economic and operational barriers to entry that the FCC identified as  
17 appropriate topics for consideration in a potential deployment analysis.  
18 This means that the company in question must have demonstrated, by the  
19 sheer scale and scope of its participation in the market, that it has  
20 overcome the operational and technological issues associated with, *e.g.*,  
21 UNE-L, OSS, collocation, transport and EELs necessary for mass-market  
22 entry. If that is not unambiguously clear from the nature of the triggering  
23 company's operations, then a potential deployment analysis would be

1 necessary to justify a finding of no impairment and no such finding should  
2 be made on the basis of the existence of the alleged trigger company in the  
3 relevant market. I have included these two evidentiary requirements as the  
4 sixth and seventh, respectively, on the flowchart in Exhibit MTB-5.

5 **Q. ARE THERE BROAD CATEGORIES OF POTENTIAL**  
6 **TRIGGERING COMPANIES THAT WOULD FAIL TO MEET**  
7 **YOUR PROPOSED STANDARD OF HAVING A**  
8 **DEMONSTRATED CAPABILITY OF HOLDING ITSELF OUT TO**  
9 **PROVIDE RETAIL LOCAL EXCHANGE SERVICE TO ALL, OR**  
10 **VIRTUALLY ALL, MASS-MARKET CUSTOMERS WITH THE**  
11 **WIRE CENTER (ITEM 6 ON THE FLOWCHART IN EXHIBIT**  
12 **MTB-5)?**

13 A. Yes. As I mentioned in discussing product market distinctions, at least two  
14 broad categories come to mind:

15 (1) Companies that serve small business, but do not serve residential  
16 customers; and

17 (2) Companies that serve customers whose ILEC loop is provided over  
18 all-copper facilities, but do not serve customers whose ILEC loop  
19 is provided over fiber feeder and IDLC.

1     **Q.     WHY DO YOU SAY THAT COMPANIES THAT DO NOT SERVE**  
2     **RESIDENTIAL CUSTOMERS IN A GIVEN GEOGRAPHIC**  
3     **MARKET SHOULD *NOT* BE CONSIDERED AS POTENTIAL**  
4     **“TRIGGERING” COMPETITORS?**

5     A.     As I have already explained, residential customers are not identical to  
6     small business customers, which in turn are not identical to the medium  
7     and larger businesses that the FCC has included in what it describes as the  
8     “enterprise market.”

9             The FCC recognized the “swing” role of small business customers  
10     in the distinctions it drew between “mass-market” and “enterprise-market”  
11     customers, noting:

12             Very small businesses typically purchase the same kinds of  
13             services as do residential customers, and are marketed to,  
14             and provided service and customer care, in a similar  
15             manner. Therefore, we will usually include very small  
16             businesses in the mass market for our analysis. We note,  
17             however, that there are some differences between very  
18             small businesses and residential customers. For example,  
19             very small businesses usually pay higher retail rates, and  
20             may be more likely to purchase additional services such as  
21             multiple lines, vertical features, data services, and yellow  
22             page listings. Therefore, we may include them with other  
23             enterprise customers, where it is appropriate in our  
24             analysis. *Triennial Review Order*, n. 432.

25             This statement, in combination with the FCC’s observations on the  
26     use of actual marketplace deployment as evidence that barriers to entry are  
27     surmountable, suggests that the Commission should allow the empirical  
28     evidence to dictate its view of whether residential and small business  
29     customers are in the same market for purposes of the trigger analysis. If a

1 carrier serves small business customers but not residential customers using  
2 its own switch, that very fact implies that there is a meaningful difference  
3 between small business and residential customers. If that pattern is  
4 repeated, so that multiple carriers serve small business customers but not  
5 residential customers using their own switches, the evidence for distinct  
6 customer class markets becomes even more compelling.

7           It would be a grave public policy error to base a finding of no  
8 impairment solely or largely on evidence of carriers self-deploying  
9 switching to serve small business customers, leaving Alabama residential  
10 customers with no meaningful competitive alternative. The Commission  
11 should require evidence that both residential and small business customers  
12 have competitive choices before it decides to eliminate CLECs' access to  
13 unbundled switching in any geographic market. Thus, a company that is  
14 not actively providing residential service with its own switches (*i e.*, one  
15 that is only providing business service) should not be counted as a trigger  
16 company for mass-market switching.

1     **Q.     YOU ALSO SUGGESTED THAT THE COMMISSION SHOULD**  
2     **CONSIDER WHETHER THE SWITCH-BASED COMPETITOR IS**  
3     **OFFERING SERVICE OVER BOTH ALL-COPPER AND IDLC**  
4     **LOOPS. WHY IS IT IMPORTANT FOR THE COMMISSION TO**  
5     **CONSIDER THE TYPES OF UNE LOOPS OVER WHICH**  
6     **POTENTIALLY TRIGGERING COMPANIES ARE PROVIDING**  
7     **RETAIL LOCAL EXCHANGE SERVICE?**

8     A..    ILECs and CLECs have engaged in a long and contentious battle over the  
9     procedures and cost for providing stand-alone unbundled loops to  
10    customer locations that the ILEC serves via fiber feeder and IDLC. To  
11    date, there is no consensus on a cost-effective means for making such  
12    loops available. There is, however, no dispute that UNE-P can be  
13    provisioned over the same IDLC facilities that the ILEC uses to provide its  
14    own retail services. Unless a potentially triggering company is providing  
15    switch-based services to mass-market customers over IDLC as well as all-  
16    copper loops, there is no actual marketplace evidence that the competitor  
17    has overcome barriers to entry for customer locations served via IDLC.  
18    Elimination of access to UNE switching under these circumstances would  
19    effectively deny competitive alternatives to the growing number of  
20    Alabama customers served via IDLC.

1     **Q.     HOW DOES THE PRECEDING DISCUSSION RELATE TO THE**  
2     **FLOWCHART IN EXHIBIT MTB-5?**

3     A.     I have identified two specific “screens” that should be considered during  
4             the analysis that occurs as part of Item 7 in the flowchart. The first  
5             “screen” asks whether the potential triggering carrier serves both  
6             residential and small business customers. The second asks whether the  
7             potential triggering carrier serves customers over both all-copper and  
8             IDLC loops. The Commission should not consider the triggers to be  
9             satisfied unless all customer groups within the identified market can be  
10            reached by at least three retail or two wholesale providers that deploy their  
11            own switches.

12    **Q.     MS. TIPTON HAS IDENTIFIED A NUMBER OF CLECs THAT**  
13    **SHE CLAIMS MEET THE SELF-PROVISIONING TRIGGER. DO**  
14    **YOU AGREE THAT THESE CARRIERS SHOULD BE COUNTED**  
15    **AS TRIGGERING COMPANIES?**

16    A.     No. Several of the carriers cited by Ms. Tipton clearly do not actively  
17             market services to residential customers. As I explained in my discussion  
18             of the trigger “screens” above, these companies should be excluded from  
19             the analysis. These companies are: \*\*\*\*\*BEGIN PROPRIETARY  
20             INFORMATION\*\*\*\*\*     \*\*\*\*\*END PROPRIETARY  
21             INFORMATION\*\*\*\*\*

1     **Q.     HOW DID YOU DETERMINE THAT THESE COMPANIES ARE**  
2           **NOT ACTIVELY MARKETING SERVICES TO RESIDENTIAL**  
3           **SUBSCRIBERS?**

4     A.     Very simply, I examined the marketing materials placed by these  
5           companies on their web sites. For each of the above companies, the  
6           description of services offered plainly indicated that their focus was on the  
7           provision of services to business customers.

8           I have attached to my rebuttal testimony Exhibit MTB-6. This  
9           exhibit reproduces relevant pages from the web sites of \*\*\*\*\*BEGIN  
10          PROPRIETARY INFORMATION\*\*\*\*\*     \*\*\*\*\*END PROPRIETARY  
11          INFORMATION\*\*\*\*\*

12    **Q.     DO THE COMPANIES YOU HAVE DISCUSSED THUS FAR**  
13          **EXHAUST THE LIST OF TRIGGERING COMPANIES CITED BY**  
14          **BELLSOUTH?**

15    A.     No. I was unable to determine the extent to which \*\*\*\*\*BEGIN  
16          PROPRIETARY INFORMATION\*\*\*\*\*     \*\*\*\*\*END PROPRIETARY  
17          INFORMATION actively markets local exchange services to residential  
18          customers using UNE-L.

1     **Q.     ARE THERE COMPANIES OTHER THAN THE ONES THAT**  
2           **YOU HAVE CITED THAT FAIL TO MEET THE CRITERIA FOR**  
3           **TRIGGERING CLECs?**

4     A.    Yes. \*\*\*\*BEGIN PROPRIETARY INFORMATION\*\*\*\*   \*\*\*\*END  
5           PROPRIETARY INFORMATION\*\*\*\* is cited by BellSouth as a  
6           triggering company in two of the BellSouth-defined markets. This  
7           company is a cable TV operator. For the reasons that I discussed earlier in  
8           this testimony, cable TV operators cannot be considered a close substitute  
9           for the offerings of the ILEC, and this company therefore should not be  
10          considered as a triggering company.

11    **Q.     DOES OTHER EVIDENCE EXIST THAT SHOWS THE EXTENT**  
12          **OF PARTICIPATION IN THE MARKET BY THE COMPANIES**  
13          **THAT BELL SOUTH CITES AS TRIGGERING COMPANIES?**

14    A.    Yes. In response to AT&T's Interrogatory Item No. 115, BellSouth  
15          provided a listing of the types and quantities of unbundled loops  
16          purchased by companies that BellSouth claims are triggering companies.  
17          While it is not clear that the lines shown in these data are limited to those  
18          lines used to provision mass market local exchange service, an  
19          examination of this information shows that these companies constitute at  
20          best a minimal and declining presence in the two BellSouth-defined  
21          markets where BellSouth claims the triggers are met.

1           The data show that the “trigger” companies cited by BellSouth  
2           purchase voice grade lines (2-wire loops and DS0 EELs) in all 19 of the  
3           wire centers in the BellSouth-defined Birmingham Zone 1 market, 5 of the  
4           7 wire centers in the BellSouth-defined Huntsville Zone 1 market, and in  
5           each of the 3 wire centers in the BellSouth-defined Montgomery Zone 1  
6           market. In only two wire centers in the Birmingham Zone 1 market do the  
7           CLECs have more than one percent of the total lines in the wire center – in  
8           the remaining Birmingham wire centers they have a miniscule fraction of  
9           the lines. Overall, the CLECs cited by BellSouth have 0.49% of the lines  
10          in the wire centers in Birmingham Zone 1, 3.38% of the lines in the wire  
11          centers in Huntsville Zone 1, and 2.50% of the lines in the Montgomery  
12          wire centers.

13          Moreover, the presence of the claimed “trigger” companies has  
14          been steadily declining in all three BellSouth-defined markets. Over the  
15          19-month period for which BellSouth reported, the number of UNE loops  
16          purchased by the CLECs has declined in all but one of the wire centers  
17          where the CLECs have a presence in the BellSouth-defined markets. By  
18          November of 2003, the companies represented in the data had only 73% of  
19          the lines that they had in May of 2002 in Birmingham, 82% of the May  
20          2002 lines in Huntsville, and 67% of the May 2002 lines in Montgomery.  
21          Exhibit MTB-7 displays graphically the growth trends in “trigger”  
22          company voice grade lines over this period.

1     **Q.     CAN YOU SUMMARIZE YOUR CONCLUSIONS REGARDING**  
2     **THE TRIGGER EVIDENCE PRESENTED BY BELL SOUTH?**

3     A.     Yes. Of the six companies cited by BellSouth as satisfying the self-  
4     provisioning trigger, I have been able to determine that five obviously do  
5     not meet the criteria for a triggering company. I have been unable to  
6     determine whether or not the remaining company should qualify as  
7     triggers. I have attached a summary of my conclusions as Exhibit MTB-8.  
8     Even if the remaining company provides service both to residential and  
9     small business mass market customers, the Commission should consider  
10    that the triggering companies represent only a very small and declining  
11    portion of the market in assessing the ability of this company to provide a  
12    realistic competitive alternative to BellSouth.

13  
14    **III.    REBUTTAL OF THE DIRECT TESTIMONY OF MR. STEGEMAN**  
15    **(POTENTIAL DEPLOYMENT MODEL)**

16    **Q.     BELL SOUTH HAS PRESENTED THE BELL SOUTH ANALYSIS**  
17    **OF COMPETITIVE ENTRY ("BACE") MODEL THROUGH THE**  
18    **TESTIMONY OF MR. STEGEMAN IN THIS PROCEEDING.**  
19    **WHAT IS YOUR UNDERSTANDING OF THE PURPOSE OF THIS**  
20    **MODEL?**

21    A.     According to Mr. Stegeman and Dr. Aron, the model is presented to show  
22    the feasibility of market entry to CLECs seeking to provide local exchange

1 service using their own switches in combination with certain unbundled  
2 loop, transport, and collocation facilities obtained from the ILEC.

3 **Q. HAVE YOU BEEN ABLE TO ASSESS THE MODEL'S**  
4 **METHODOLOGY AND CALCULATIONS?**

5 A. No, I have not. The model presented by BellSouth is a compiled Visual  
6 Basic application. As such, none of the formulae or intermediate results of  
7 calculations are accessible or viewable. Consequently, at this time the  
8 model is a "black box." I have only been able to view the effect that  
9 changes in inputs have on the model's outputs.

10 **Q. HOW DO THE MODEL'S INPUTS AFFECT THE MODEL'S**  
11 **OUTPUTS?**

12 A. I would first note that the combination of inputs used in the default  
13 configuration of the BACE virtually guarantees that a CLEC will be  
14 profitable in almost all wire centers in the state. Varying a single input,  
15 therefore, may not affect the number of markets, however defined, that  
16 appear to be profitable based on BACE results. I tested the sensitivity of  
17 the model by changing inputs that should have a dramatic impact on  
18 CLEC profitability. In particular, the customer churn rate and the customer  
19 acquisition cost should be significant factors in determining profitability.  
20 If the customer churn rate is high, or if the customer acquisition cost is  
21 high, the CLEC will likely be unable to recover customer specific costs  
22 from the revenue derived from each customer during the time that the

1 customer remains with the CLEC. The CLEC's cost of capital and the  
2 CLEC's market share likewise should be significant factors in determining  
3 profitability, in that they will affect the CLEC's ability to recover its  
4 capital expenditures for collocation and other capital equipment, and the  
5 nonrecurring charges associated with establishing collocation facilities and  
6 transport facilities.

7 Varying each of these inputs individually did little to change the  
8 number of BellSouth wire centers that were projected by the model to be  
9 profitable. Using BellSouth's default inputs, but turning off certain filters  
10 used by the model that eliminate unprofitable market segments, the BACE  
11 estimated that net present value would be negative for mass market  
12 customers in 32 of 146 wire centers in BellSouth territory. Increasing the  
13 cost of capital from BellSouth's default value of 13.09% to 15% slightly  
14 reduced CLEC profitability, but caused no additional wire centers to  
15 produce negative net present value. Changes in the CLECs market share  
16 had a somewhat greater effect on model results. Decreasing market share  
17 from BellSouth's default value to 10% in all mass market segments  
18 increased the number of negative net present value wire centers from 32 to  
19 70. Decreasing market share further to 5% in all mass market segments  
20 resulted in a further increase in negative net present value wire centers to  
21 85.

22 Manipulating the customer churn rates also had a relatively small  
23 effect on the number of unprofitable wire centers. Keeping the cost of

1 capital at 15%, increasing monthly customer churn from BellSouth's  
2 default values to 5% across all mass market customer segments increased  
3 the number of negative net present value wire centers from 32 to 38.  
4 Increasing churn further to 6.5% had the effect of increasing the number  
5 of unprofitable wire centers to 47.

6 I have attached to this testimony Exhibit MTB-9, which presents  
7 the results of several sensitivity tests that I performed on the BACE  
8 model.

9 Varying each of these inputs certainly affects the absolute level of  
10 CLEC profits. Increasing the customer monthly churn rate from  
11 BellSouth's default value to 5%, for example, reduces CLEC profitability  
12 overall by almost 15%, and further increasing the churn rate to 6.5%  
13 reduces overall profitability by approximately one-third. As I will show  
14 later in this testimony, the combination of correct input values to BACE  
15 can result in a much different picture of the potential profitability of CLEC  
16 UNE-L based local exchange service.

17

18 Q. DOES THE MODEL ACCURATELY PORTRAY THE  
19 CHALLENGES FACED BY CLECs IN PROVIDING LOCAL  
20 EXCHANGE SERVICES?

1 A. No, it does not, in its default configuration. An analysis of the inputs used  
2 in the model and the overall operation of the model reveals a number of  
3 aspects of the model that cause it to present misleading and inaccurate  
4 results.

5 Q. **HOW DOES THE MODEL PRESENT MISLEADING RESULTS IN**  
6 **ITS DEFAULT CONFIGURATION?**

7 A. A part of the problem is that the BACE, operated with default inputs,  
8 discards certain markets where CLEC entry is, on the model's own terms,  
9 unprofitable. The default inputs used in the model cause the model to  
10 discard: 1) LATAs for which CLEC entry is unprofitable, 2) markets for  
11 which CLEC entry is unprofitable, and 3) customers that may not  
12 profitably be served. The result of these exclusions is that the model  
13 results portray CLEC entry as more profitable than is actually, under the  
14 model's own terms, the case.

15 A second aspect of the problem lies in the market definition  
16 proposed by BellSouth and in the way that the model aggregates results to  
17 conform to this market definition. The model performs this aggregation in  
18 two ways. First, although the model calculates results separately for the  
19 mass market and enterprise market in each wire center, it aggregates  
20 results for these two product markets into a single value. Second, although  
21 the model operates fundamentally at the level of the individual wire  
22 center, it aggregates the results for all wire centers in each of BellSouth's

1 proposed market areas into a single value. The result is that the model  
2 result presented by BellSouth obscures differences in the profitability of  
3 the enterprise and mass markets, and in the profitability of each wire  
4 center in a manner that in turn obscures factors that enter into each  
5 CLEC's decision whether or not to enter a given market. Exhibit MTB-10  
6 to this testimony presents the results of the BACE model, using  
7 BellSouth's default inputs with the exclusionary filters turned off, for the  
8 individual wire centers in each of BellSouth's proposed markets. Note that  
9 in the Mobile Zone 3 "market," one of the BellSouth-defined markets for  
10 which no impairment is claimed by Dr. Aron, three of the eight wire  
11 centers yields negative net present value to a prospective CLEC. The same  
12 phenomenon may be observed in several of the other markets proposed by  
13 BellSouth. BellSouth's proposed market definition obscures pockets of  
14 unprofitability where BellSouth's own analysis shows that it would be  
15 unprofitable for a CLEC to provide service there in a UNE-L environment.  
16 If the market definition proposed by BellSouth is adopted, customers  
17 located in those wire centers could be left without competitive alternatives.

18 **IV. REBUTTAL OF THE DIRECT TESTIMONY OF DR. ARON**  
19 **(POTENTIAL DEPLOYMENT)**

20 **Q. DR. DEBRA ARON HAS PRESENTED TESTIMONY ENDORSING**  
21 **THE APPROACH TAKEN BY THE BACE IN ESTIMATING THE**  
22 **CLECS' PROFITABILITY IN OFFERING LOCAL EXCHANGE**

1           **SERVICE USING THEIR OWN SWITCHES. DO YOU DISAGREE**  
2           **WITH DR. ARON'S STATEMENTS IN THIS REGARD?**

3       A.     As I have already stated, I do not disagree with the general approach to  
4             estimating CLEC profitability outlined in Dr. Aron's and Mr. Stegeman's  
5             testimony. I also have stated concerns with the manner in which this  
6             approach is implemented by the model.

7       **Q.     DR. ARON ALSO PROPOSES A NUMBER OF INPUTS TO THE**  
8             **MODEL THAT SHE CLAIMS SHOULD BE USED IN THE**  
9             **POTENTIAL DEPLOYMENT ANALYSIS. DO YOU AGREE WITH**  
10            **DR. ARON'S RECOMMENDATIONS?**

11      A.     No, I do not. Many of the input assumptions proposed by Dr. Aron for use  
12             in the BACE model are unrealistic, and represent a quite optimistic view  
13             of the challenges that would face CLECs in a post-UNE-P environment.

14      **Q.     AS JUSTIFICATION FOR CHOOSING VALUES THAT DO NOT**  
15             **REFLECT CURRENT CLEC EXPERIENCE, DR. ARON STATES**  
16             **THAT THE FACT THAT SEVERAL CLECS HAVE GONE**  
17             **BANKRUPT SUGGESTS THAT "...ON AVERAGE, CLECS DO**  
18             **NOT HAVE OPTIMALLY EFFICIENT OPERATIONS." DO YOU**  
19             **AGREE?**

20      A.     Certainly not. If anything, it should suggest the opposite. Any firm faced  
21             with bankruptcy will do anything it can to cut operating expenses in an

1 effort to remain solvent. This may not be an “optimally efficient” mode of  
2 operation, but it would be suboptimal to the low side; the operating  
3 expense would not reflect the level of expense that would be expected for  
4 an efficient firm in sustainable operation.

5 **Q. DR. ARON RECOMMENDS THAT THE ULTIMATE MARKET**  
6 **SHARE FOR THE EFFICIENT CLEC BE SET AT 15% OVER ALL**  
7 **MARKET SEGMENTS. DO YOU AGREE WITH THIS**  
8 **RECOMMENDATION?**

9 A. No, I do not. Dr. Aron cites penetration levels achieved by CLECs using  
10 UNE-P to provide local exchange service and penetration levels by cable  
11 operators achieved among customers that subscribe to cable as  
12 justification for her recommendation. I would note first that the 15%  
13 market share number cited for CLEC market penetration is for all CLECs  
14 in aggregate, not for individual CLECs (with the exception of the  
15 penetration cited for AT&T in New York). I also would note that the cable  
16 penetration figures are for penetration among only those customers that  
17 are subscribers to the cable system, with a total subscriber base only of  
18 those subscribers for whom cable services are available – not the entire  
19 universe of telephone subscribers. Nationwide, CLECs, *in aggregate*, have  
20 achieved a market penetration to date of just under 15%. If the FCC has  
21 established as a benchmark the presence of three unaffiliated retail  
22 providers of local exchange service, this would imply a market share for

1 each carrier of only 5%, assuming each is equally successful in winning  
2 customers' business.

3 In view of the challenges that will face CLECs in moving from a  
4 UNE-P based service to a service based on self-provisioning of the  
5 switching function, and in view of the increasingly aggressive winback  
6 activities being pursued by ILECs, including BellSouth, I believe that a  
7 15% market share projection is far too aggressive. The ultimate market  
8 share that an individual CLEC may achieve is unknown and unknowable,  
9 depending as it does on many uncertain factors, including the price that  
10 the CLEC is able to establish relative to the ILEC, the quality of service  
11 that the CLEC is able to provide (a factor that is only partly under the  
12 control of the CLEC, because the loop and transport components of the  
13 service will remain under the control of the ILEC, from a technical  
14 perspective), the ability of the ILEC to efficiently manage the hot cut  
15 process, and the ability of the CLEC to bring new products and service  
16 capability to the market and the cost of doing so. Additionally, as I have  
17 discussed earlier in this testimony, the FCC's decision to preclude CLECs  
18 from obtaining access to the broadband data capabilities of hybrid  
19 fiber/copper loops means that CLECs will be unable to serve a large and  
20 increasingly important segment of the market, particularly higher-  
21 spending residential and small business customers, who will demand  
22 broadband data services.

1     **Q.     DR. ARON ALSO RECOMMENDS A CHURN RATE OF 4% PER**  
2     **MONTH FOR RESIDENTIAL CUSTOMERS. DO YOU AGREE**  
3     **WITH THIS RECOMMENDATION?**

4     A.     No, I do not. The same factors that I have discussed with regard to the  
5     market share that will be attainable by CLECs in the post-UNE-P market  
6     apply as well to the churn rate that CLECs will experience. Any input to  
7     the model that relies exclusively on the experience of UNE-P based  
8     CLECs will likely understate the actual churn rates that will be  
9     experienced going forward. Again, the actual churn rate is unknown and  
10    unknowable at this time. In making its findings regarding potential  
11    deployment, the Commission should consider a range of possibilities,  
12    including scenarios that increase the level of churn over historical levels.

13    **Q.     DR. ARON CITES SEVERAL ANALYST'S REPORTS TO**  
14    **SUPPORT HER RECOMMENDED CUSTOMER ACQUISITION**  
15    **COST OF \$95. DO YOU AGREE WITH THIS**  
16    **RECOMMENDATION?**

17    A.     No, I do not. Dr. Aron cites a number of sources, including (at the low  
18    end) a reference to ZTel's estimated customer acquisition costs that does  
19    not include advertising. She goes on to claim that an efficient UNE-L  
20    based CLEC would likely incur lower customer acquisition costs than  
21    current UNE-P based CLECs.

1           In supporting a customer acquisition input of \$130, Dr. Gabel cites  
2           in notes attached to his model a range of estimates from the same types of  
3           sources cited by Dr. Aron. These estimates range from \$80 to more than  
4           \$400 per customer, a range higher at the low end and much higher at the  
5           high end than the estimates provided by Dr. Aron.

6           Again, customer acquisition cost in a post-UNE-P market is an  
7           unknown and unknowable quantity. Some of the factors that I already  
8           have discussed with regard to market share and churn also will have an  
9           impact on customer acquisition costs, particularly the price that the CLEC  
10          will be able to establish relative to the ILEC's price, the aggressiveness of  
11          ILEC winback efforts, and the quality of service that the CLECs are able  
12          to attain. Given that the range of estimates for current CLEC customer  
13          acquisition cost varies so widely, I believe that it would be prudent for the  
14          Commission to consider a range of scenarios with regard to customer  
15          acquisition costs, including scenarios where customer acquisition costs in  
16          the post-UNE-P market substantially exceed those for UNE-P based  
17          CLECs.

18   **V.   RESULTS OF RUNNING BELLSOUTH MODEL WITH MORE**  
19   **REALISTIC INPUTS, AND WITH THE CORRECT WIRE**  
20   **CENTER MARKET DEFINITION.**

21   **Q.   DR. BRYANT, IN YOUR DIRECT TESTIMONY YOU**  
22   **PRESENTED THE RESULTS OF THE IMPAIRMENT ANALYSIS**  
23   **TOOL THAT YOU SUBMITTED USING A RANGE OF POSSIBLE**

1           **INPUTS, SHOWING THE RESULT FOR A NUMBER OF**  
2           **POSSIBLE SCENARIOS. HAVE YOU PERFORMED A SIMILAR**  
3           **ANALYSIS USING THE BACE?**

4     A.     Not in the same way. Because the impairment analysis tool calculates  
5           results relatively quickly, it was possible to evaluate several hundred  
6           randomly-generated scenarios in a relatively short period of time. The  
7           BACE is a more complex model, and takes approximately 40 minutes to  
8           produce results for any set of specified inputs. Due to the short time  
9           frames in this proceeding and the press of similar proceedings in other  
10          states, I was not able to produce the same type of analysis using the BACE  
11          as I presented using the impairment analysis tool.

12                 I have already presented in Exhibit MTB-9 a summary of the  
13           results of a sensitivity analysis that I performed for several individual user  
14           inputs to the model. I have also performed a series of runs of the model  
15           using combinations of certain key variables. The results of this analysis  
16           are shown in Exhibit MTB-11. Each column in this exhibit presents the  
17           model results for the mass market customers in each wire center. For all  
18           model runs, BellSouth's exclusionary filters were turned off. The column  
19           header in each of the columns shows the user inputs that were changed  
20           from BellSouth's default values.

21     **Q.     IN THIS EXHIBIT, YOU USE MONTHLY REVENUE OF \$53.70.**  
22           **WHAT DOES THIS VALUE MEAN?**

1     A.     As I noted in my direct testimony, MCI recently has obtained data from  
2           TNS Telecoms on the monthly average residential telecommunications  
3           spending by household for each wire center in Alabama. This is the same  
4           source of information that is used by the FCC in compiling its annual  
5           statistics on telecommunications expenditures, and is based on a survey of  
6           actual customer bills. The \$53.70 value that I used is the weighted average  
7           expenditure per line for local and long distance services, and includes the  
8           subscriber line charge and taxes. This value was applied only to the  
9           residential revenue inputs in the BACE model. Business revenues were  
10          left at BellSouth default values.

11    **Q.     WHAT DOES YOUR ANALYSIS SHOW?**

12    A.     It is difficult to draw conclusions from my analysis. The BACE model  
13          produced results that clearly are contrary to reason. Note that in column B  
14          of Exhibit MTB-11, I used a CLEC market share of 10% as an input. In  
15          column C, all other inputs were held constant, but CLEC market share was  
16          reduced to 5%. One would expect that a reduction in market share would  
17          result in a reduction in profitability, but the BACE model instead shows  
18          that CLECs would actually be *more* profitable. Due to the occasional  
19          anomalous results that the model produces, I do not have confidence in the  
20          ability of the model to produce valid results. However, just as in the  
21          analysis that I presented in my direct testimony, the results are both highly  
22          variable among wire centers and overall quite dependent upon the inputs  
23          values chosen. Exhibit MTB-11 shows that, depending upon the

1 combination of input values chosen, CLECs are not profitable in varying  
2 numbers of wire centers in BellSouth's territory in Alabama.

3 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING**  
4 **THE BACE MODEL.**

5 A. Having had only a limited amount of time to work with the model, and  
6 without access to the source code or intermediate calculations produced by  
7 the model, I am not in a position at this time to either endorse or reject the  
8 model itself. As I have discussed in this testimony, there are aspects of the  
9 model's operation and the relationship between inputs to the model and  
10 the outputs the model produces that raise serious questions as to whether  
11 the model accurately and reliably calculates the costs and revenues that are  
12 pertinent to a CLEC's decision to provide local exchange service using  
13 self-provisioned switches.

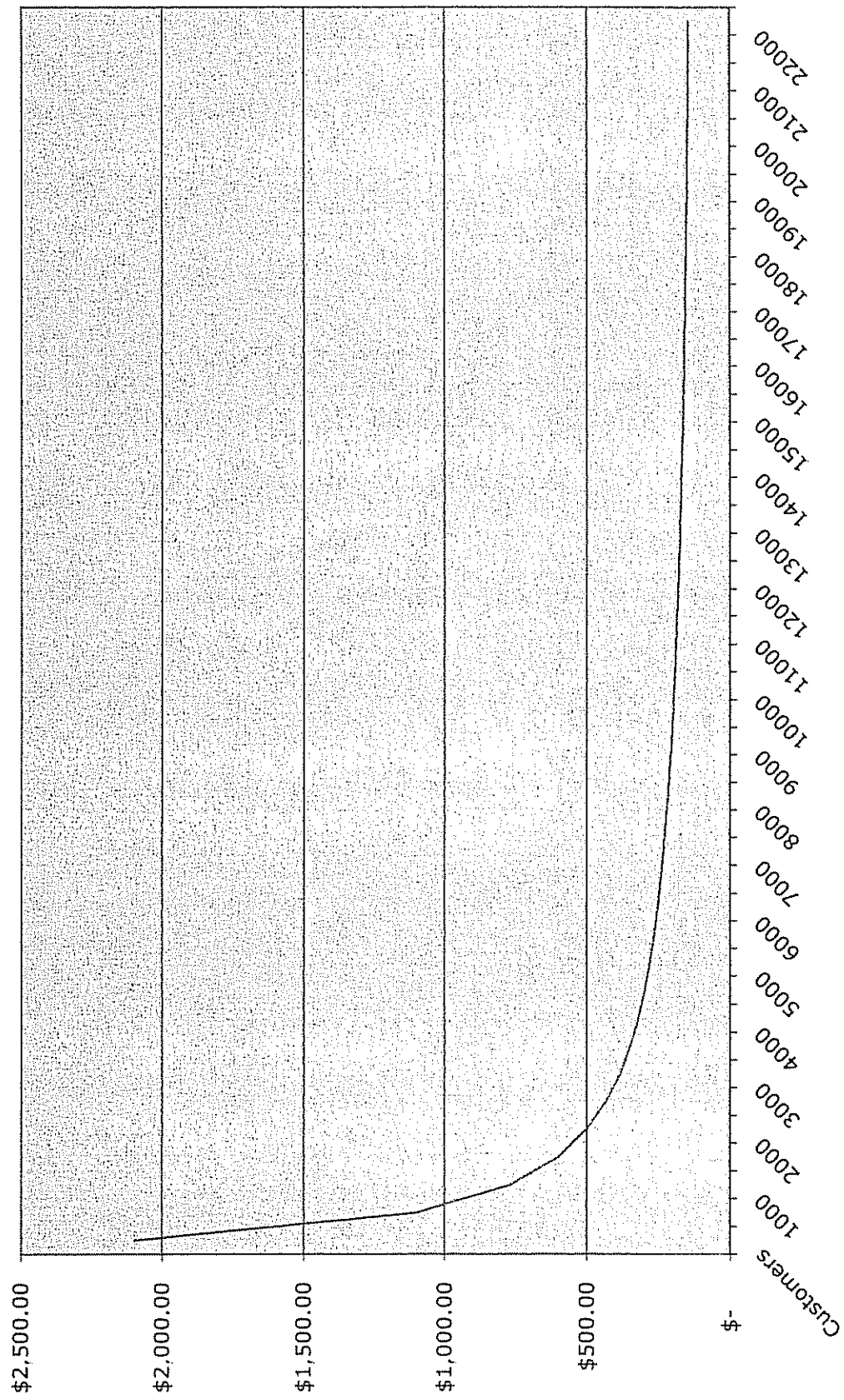
14 I would emphasize again that many of the inputs to the model are  
15 uncertain – it cannot be known with any certainty what costs would be  
16 incurred and what revenues would be available to CLECs in a post-UNE-P  
17 environment. The best that can be said, whatever model is used, is that  
18 under some sets of assumptions, CLECs can be profitable in some wire  
19 centers in Alabama. Under other sets of assumptions, CLECs are not  
20 profitable in any wire center in Alabama. Given this uncertainty, the  
21 Commission cannot conclude that CLECs are not impaired in any market  
22 in Alabama.

1     **Q.     DOES THIS CONCLUDE YOUR TESTIMONY?**

2     **A.     Yes, it does.**

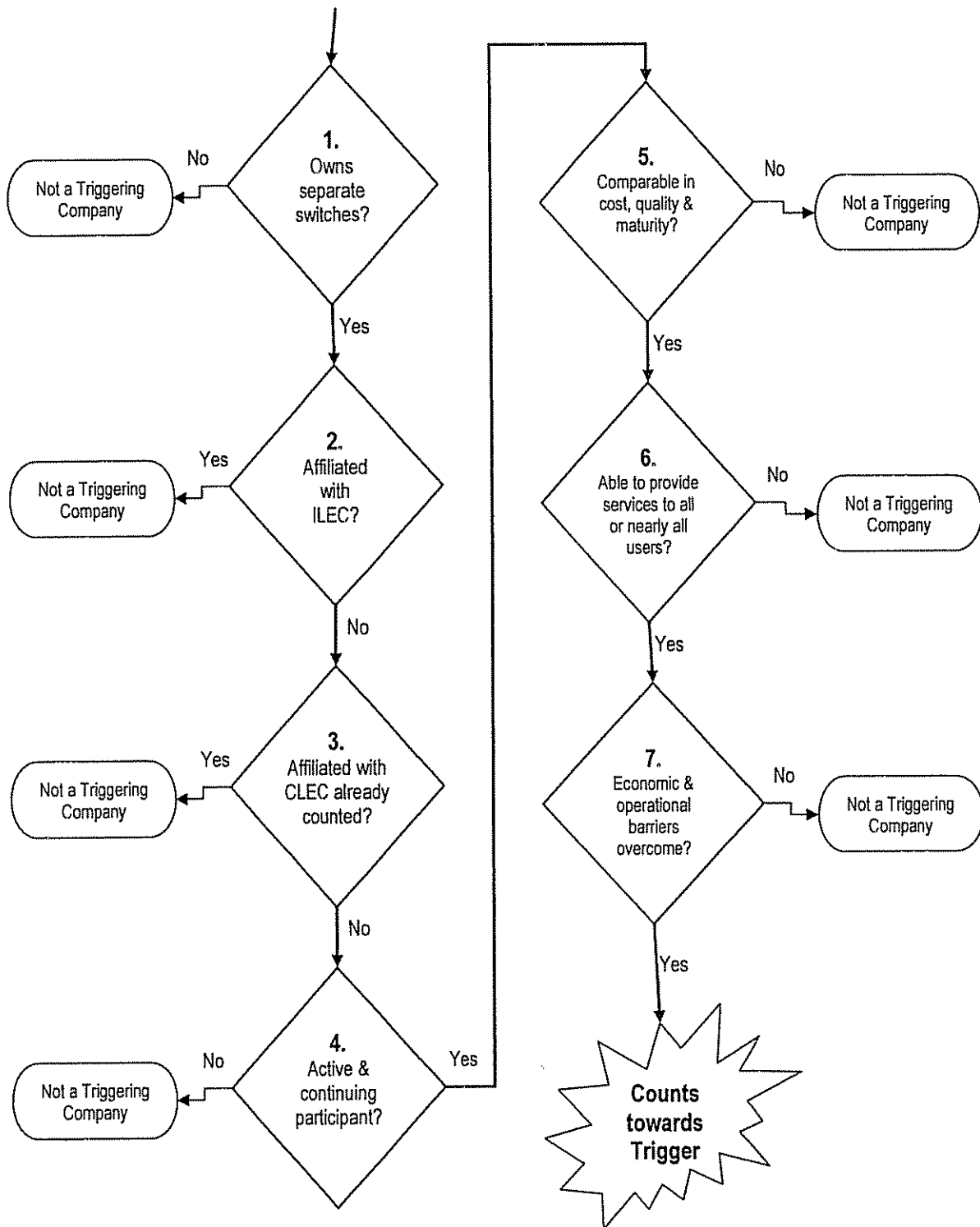
## **EXHIBIT 4**

Investment Per Customer - Local Switching



## EXHIBIT 5

**Exhibit MTB-5**  
**Retail Trigger Criteria Flowchart**



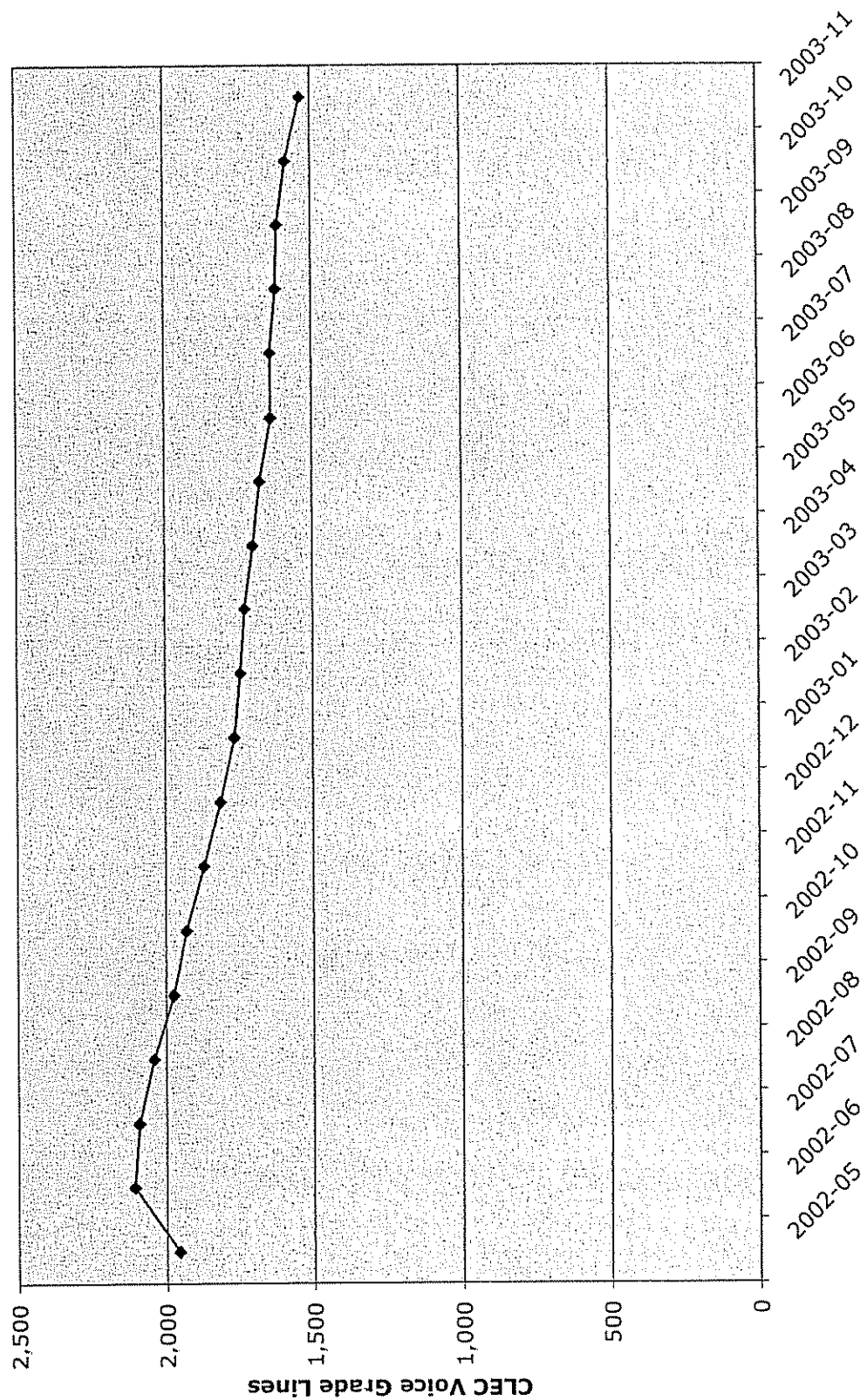
**EXHIBIT 6**

**CONFIDENTIAL AND PROPRIETARY**

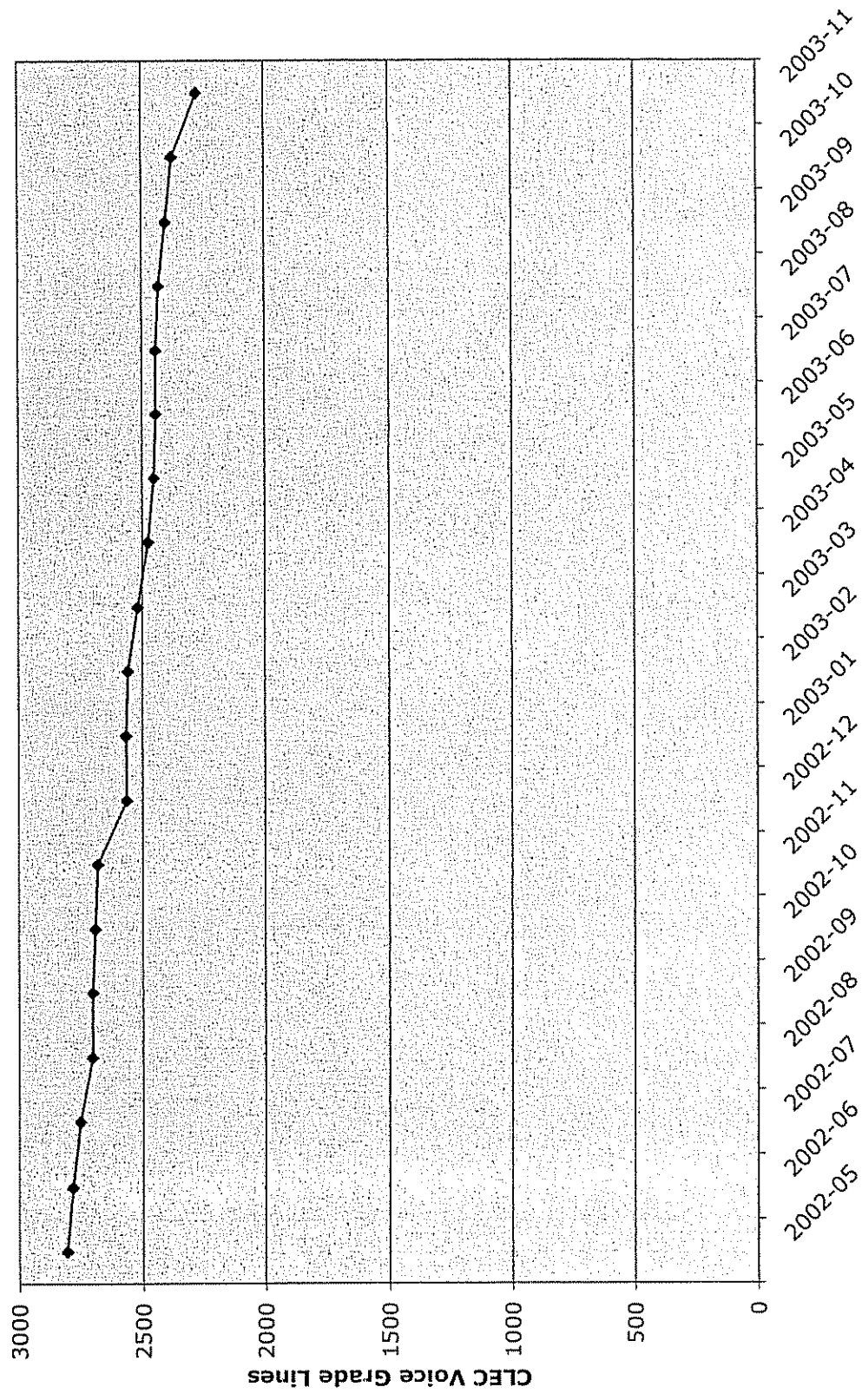
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**EXHIBIT 7**

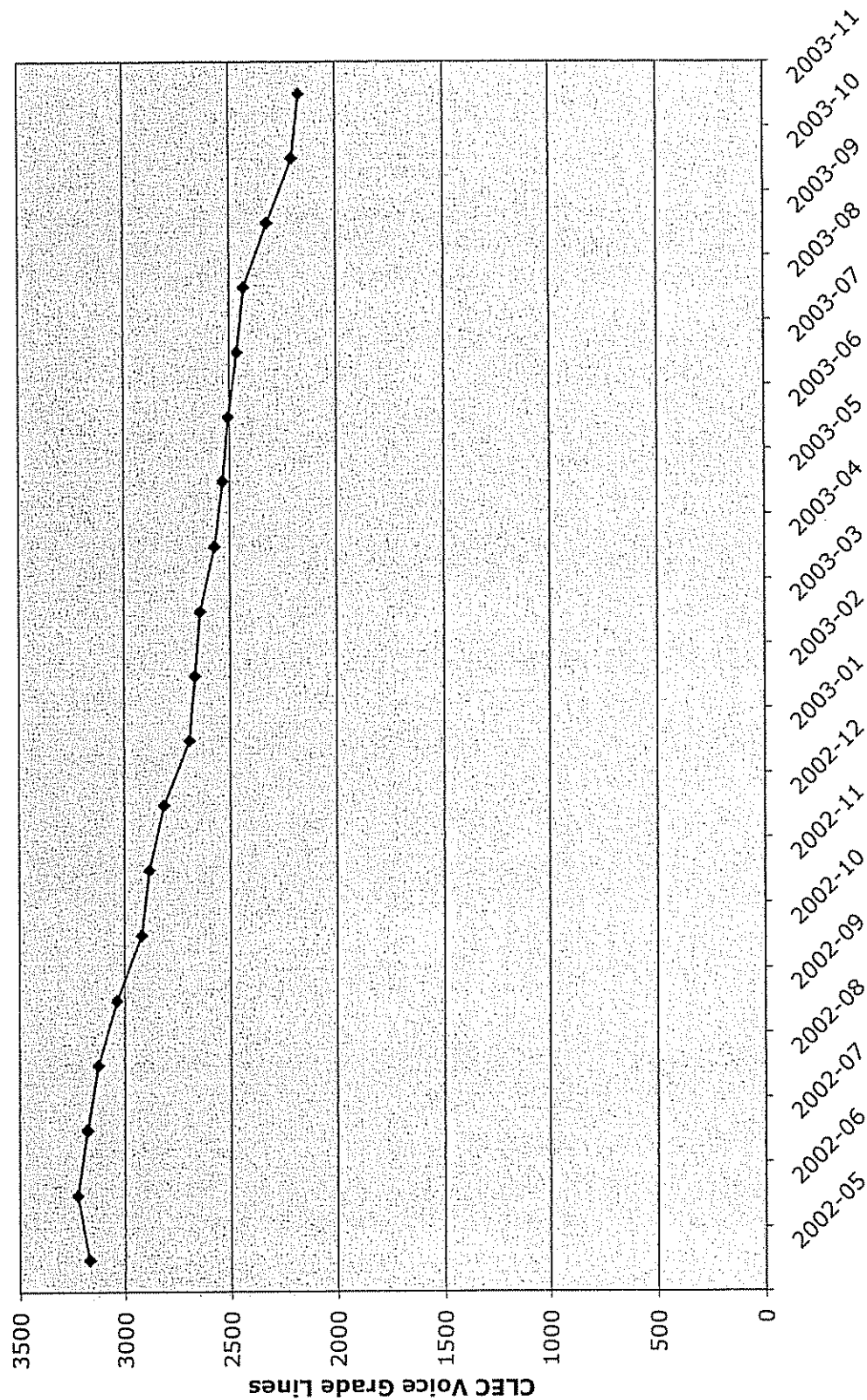
## Birmingham Zone 1



## Huntsville Zone 1



## Montgomery Zone 1



**EXHIBIT 8**

**CONFIDENTIAL AND PROPRIETARY**

**FILED UNDER SEAL**

## EXHIBIT 9

Rebuttal Testimony of Dr. Mark T. Bryant  
Exhibit MTB-9

Model Assumptions	Number of Wire Centers with Negative Net Present Value	% of Wire Centers with Negative Net Present Value
BST Default - No Exclusions	32	21.9%
CLEC Capital Cost @ 15%	32	21.9%
CLEC Capital Cost @ 17%	33	22.6%
Monthly Churn (res) at 5%, Capital Cost at 15%	38	26.0%
Monthly Churn (res) at 6.5%, Capital Cost at 15%	47	32.2%
Monthly Churn (res) at 8.33%, Capital Cost at 15%	58	39.7%
Capital Structure 50/50	32	21.9%
Mkt Share all MM segment 10%, slow penetration	70	47.9%
Mkt Share all MM segment 5%, slow penetration	85	58.2%
Res Sales cost @ \$140	44	30.1%

## EXHIBIT 10

BST Default Inputs

Include all LATAs, customers, markets, report by wire centers, separately for MM and Enterprise

Wire Center	Net Present Value	NPV for Mass Market	NPV for Enterprise	UNE Zone	CEA
ANTNALMT	\$1,407,629.87	\$858,891.62	\$548,738.25	Zone1	Anniston AL
ANTNALLE	\$155,407.81	\$98,628.86	\$56,778.96	Zone2	Anniston AL
ANTNALOX	\$694,927.16	\$497,106.39	\$197,820.77	Zone2	Anniston AL
CHBGALMA	\$96,842.04	\$91,592.57	\$5,249.47	Zone2	Anniston AL
JCVLALMA	\$194,830.55	\$178,302.63	\$16,527.92	Zone2	Anniston AL
MNFDALMA	\$9,685.43	\$21,969.78	(\$12,284.35)	Zone2	Anniston AL
TLDGALMA	\$720,253.22	\$404,996.43	\$315,256.80	Zone2	Anniston AL
	\$1,871,946.21	\$1,292,596.65	\$579,349.56		
OHTCALMA	(\$2,414.20)	\$16,084.40	(\$18,498.60)	Zone3	Anniston AL
TLDGALRF	(\$54,910.47)	(\$66,530.90)	\$11,620.43	Zone3	Anniston AL
LFYTALRS	\$77,963.15	\$80,660.11	(\$2,696.96)	Zone3	Atlanta GA-AL-NC
PDMTALMA	\$87,182.65	\$107,767.81	(\$20,585.16)	Zone3	Atlanta GA-AL-NC
	\$107,821.12	\$137,981.41	(\$30,160.29)		
ALBSALMA	\$2,060,791.17	\$1,529,719.87	\$531,071.31	Zone1	Birmingham AL
BRHMALCH	\$1,424,050.12	\$852,524.48	\$571,525.64	Zone1	Birmingham AL
BRHMALCP	\$1,711,631.16	\$1,393,719.19	\$317,911.97	Zone1	Birmingham AL
BRHMALEL	\$1,046,972.48	\$806,244.26	\$240,728.22	Zone1	Birmingham AL
BRHMALEN	\$1,600,477.73	\$1,341,565.83	\$258,911.90	Zone1	Birmingham AL
BRHMALEW	\$717,524.07	\$493,810.58	\$223,713.49	Zone1	Birmingham AL
BRHMALEW	\$677,446.10	\$563,914.42	\$113,531.68	Zone1	Birmingham AL
BRHMALEW	\$831,709.39	\$282,574.21	\$549,135.18	Zone1	Birmingham AL
BRHMALEW	\$1,997,831.01	\$1,137,882.55	\$859,948.46	Zone1	Birmingham AL
BRHMALEW	\$4,282,488.10	\$1,571,027.42	\$2,711,460.68	Zone1	Birmingham AL
BRHMALEW	\$2,149,818.84	\$1,397,857.66	\$751,961.18	Zone1	Birmingham AL
BRHMALEW	\$1,506,475.30	\$594,718.38	\$911,756.91	Zone1	Birmingham AL
BRHMALEW	\$2,500,856.79	\$1,335,894.78	\$1,164,962.02	Zone1	Birmingham AL
BRHMALEW	\$802,057.78	\$574,145.95	\$227,911.83	Zone1	Birmingham AL
BRHMALEW	\$2,217,572.54	\$1,559,159.52	\$658,413.03	Zone1	Birmingham AL
BRHMALEW	\$1,092,660.84	\$961,515.04	\$131,145.80	Zone1	Birmingham AL
BRHMALEW	\$1,225,046.71	\$716,671.38	\$508,375.33	Zone1	Birmingham AL
BSMRALMA	\$2,311,677.51	\$1,608,380.35	\$703,297.16	Zone1	Birmingham AL
GRDLALNM	\$558,406.24	\$479,086.09	\$79,320.14	Zone1	Birmingham AL
	\$30,715,493.88	\$19,200,411.94	\$11,515,081.94		
BSMRALHT	\$538,421.97	\$450,747.99	\$87,673.98	Zone2	Birmingham AL
CALRALMA	\$156,150.91	\$103,478.26	\$52,672.65	Zone2	Birmingham AL
CLMBALMA	\$281,923.57	\$180,306.83	\$101,616.74	Zone2	Birmingham AL
CLMNALMA	\$998,172.02	\$596,891.89	\$401,280.12	Zone2	Birmingham AL
CRDVALMA	\$63,444.73	\$66,805.75	(\$3,361.02)	Zone2	Birmingham AL
DORAALMA	\$112,320.50	\$99,571.34	\$12,749.16	Zone2	Birmingham AL
GYVLALNM	\$91,470.07	\$83,274.14	\$8,195.93	Zone2	Birmingham AL
JSPRALMT	\$828,732.57	\$584,520.49	\$244,212.08	Zone2	Birmingham AL
MNTVALNM	\$129,916.60	\$91,093.11	\$38,823.49	Zone2	Birmingham AL
PNSNALMA	\$595,675.97	\$534,906.39	\$60,769.58	Zone2	Birmingham AL
WRRRALNM	\$348,653.45	\$335,316.42	\$13,337.03	Zone2	Birmingham AL
	\$4,144,882.34	\$3,126,912.60	\$1,017,969.74		
BSMRALBP	(\$124,840.99)	(\$111,679.24)	(\$13,161.74)	Zone3	Birmingham AL
CHLSALMA	\$20,074.09	\$46,372.99	(\$26,298.90)	Zone3	Birmingham AL
CLANALMA	\$65,960.87	\$63,371.95	\$2,588.92	Zone3	Birmingham AL
CLMNALFA	(\$197,416.07)	(\$174,346.59)	(\$23,069.49)	Zone3	Birmingham AL
CLMNALJC	(\$193,090.71)	(\$182,128.84)	(\$10,961.86)	Zone3	Birmingham AL
CNVIALMA	\$91,892.94	\$104,972.37	(\$13,079.43)	Zone3	Birmingham AL

Wire Center	Net Present Value	NPV for Mass Market	NPV for Enterprise	UNE Zone	CEA
CRHLALNM	\$20,946.25	\$41,219.32	(\$20,273.07) Zone3		Birmingham AL
HNVLALBR	(\$94,601.37)	(\$76,107.95)	(\$18,493.42) Zone3		Birmingham AL
HNVLALNM	\$16,080.72	\$12,632.76	\$3,447.95 Zone3		Birmingham AL
MPVLALMA	(\$63,717.59)	(\$48,602.87)	(\$15,114.72) Zone3		Birmingham AL
PRSHALNM	(\$18,779.04)	(\$4,782.60)	(\$13,996.44) Zone3		Birmingham AL
VNCNALMA	(\$21,996.50)	(\$6,742.23)	(\$15,254.27) Zone3		Birmingham AL
WBTNALNM	\$10,273.81	\$19,812.66	(\$9,538.85) Zone3		Birmingham AL
	(\$489,213.59)	(\$316,008.28)	(\$173,205.31)		
AUBNALMA	\$1,467,118.05	\$1,076,564.87	\$390,553.18 Zone1		Columbus GA-AL
ALCYALMT	\$548,988.33	\$369,512.23	\$179,476.10 Zone2		Columbus GA-AL
OPLKALMT	\$948,792.32	\$657,252.65	\$291,539.67 Zone2		Columbus GA-AL
PHCYALMA	(\$818,666.22)	(\$167,795.66)	(\$650,870.56) Zone2		Columbus GA-AL
SYLCALMT	\$563,589.04	\$473,693.40	\$89,895.63 Zone2		Columbus GA-AL
	\$1,242,703.47	\$1,332,662.62	(\$89,959.16)		
DDVLALMA	(\$197,180.91)	(\$146,066.31)	(\$51,114.59) Zone3		Columbus GA-AL
GDWRALMA	(\$23,952.84)	(\$9,662.92)	(\$14,289.92) Zone3		Columbus GA-AL
HRBOALOM	(\$91,869.81)	(\$76,059.73)	(\$15,810.08) Zone3		Columbus GA-AL
PHCYALFM	(\$216,648.69)	(\$146,946.33)	(\$69,702.36) Zone3		Columbus GA-AL
TSKGALMA	\$189,820.05	\$165,416.31	\$24,403.75 Zone3		Columbus GA-AL
	(\$339,832.20)	(\$213,318.99)	(\$126,513.21)		
DCTRALMT	\$3,195,243.34	\$1,931,544.59	\$1,263,698.75 Zone1		Decatur AL
HRTSALNM	\$437,600.10	\$352,747.75	\$84,852.35 Zone2		Decatur AL
CRLDALMA	(\$118,193.55)	(\$113,607.86)	(\$4,585.69) Zone3		Decatur AL
HRTSALPE	(\$72,188.81)	(\$57,871.66)	(\$14,317.15) Zone3		Decatur AL
MOLTALNM	\$160,576.26	\$119,212.17	\$41,364.10 Zone3		Decatur AL
TWCKALMA	(\$145,601.64)	(\$136,699.19)	(\$8,902.45) Zone3		Decatur AL
	(\$175,407.74)	(\$188,966.55)	\$13,558.81		
EUFLALMA	\$502,775.78	\$385,972.99	\$116,802.79 Zone2		Dothan AL-FL-GA
CYTNALMA	(\$113,651.88)	(\$93,627.59)	(\$20,024.29) Zone3		Dothan AL-FL-GA
SHFDALMT	\$1,477,813.35	\$967,406.17	\$510,407.18 Zone1		Florence AL
FLRNALMA	\$1,118,069.56	\$717,090.13	\$400,979.42 Zone2		Florence AL
KLLNALMA	\$28,865.09	\$66,879.46	(\$38,014.37) Zone3		Florence AL
LGTNALMA	(\$134,104.08)	(\$114,005.52)	(\$20,098.56) Zone3		Florence AL
LXTNALMA	(\$26,243.61)	(\$13,287.77)	(\$12,955.84) Zone3		Florence AL
RDBAALMA	\$28,135.23	\$57,610.65	(\$29,475.41) Zone3		Florence AL
RLVLALMA	\$382,847.87	\$336,133.30	\$46,714.56 Zone3		Florence AL
RRVLALMA	\$69,446.52	\$87,867.54	(\$18,421.01) Zone3		Florence AL
	\$348,947.02	\$421,197.66	(\$72,250.63)		
GDSDALMT	\$1,425,817.64	\$855,166.77	\$570,650.87 Zone1		Gadsden AL

Rebuttal Testimony of Dr. Mark T. Bryant  
Exhibit MTB-10

Wire Center	Net Present Value	NPV for Mass Market	NPV for Enterprise	UNE Zone	CEA
ATTLALNM	\$239,162.69	\$212,698.47	\$26,464.22	Zone2	Gadsden AL
GDSDALHS	\$286,888.22	\$242,589.82	\$44,298.40	Zone2	Gadsden AL
GDSDALRD	\$405,888.23	\$346,484.56	\$59,403.66	Zone2	Gadsden AL
	\$931,939.14	\$801,772.85	\$130,166.28		
HNVIALLW	\$1,500,290.40	\$1,293,748.60	\$206,541.79	Zone1	Huntsville AL-TN
HNVIALLMT	\$2,526,233.33	\$1,491,997.11	\$1,034,236.22	Zone1	Huntsville AL-TN
HNVIALLPW	\$1,853,864.37	\$1,383,560.29	\$470,304.07	Zone1	Huntsville AL-TN
HNVIALLRA	\$60,679.99	\$478.64	\$60,201.35	Zone1	Huntsville AL-TN
HNVIALLRW	\$246,366.37	\$37,471.33	\$208,895.04	Zone1	Huntsville AL-TN
HNVIALLUN	\$2,085,609.35	\$1,211,018.22	\$874,591.14	Zone1	Huntsville AL-TN
MDSNALNM	(\$2,171,855.01)	(\$1,412,775.68)	(\$759,079.34)	Zone1	Huntsville AL-TN
	\$6,101,188.80	\$4,005,498.52	\$2,095,690.28		
ALVLALMA	\$767,182.72	\$554,995.24	\$212,187.48	Zone2	Huntsville AL-TN
ATHNALMA	\$1,216,832.81	\$858,991.98	\$357,840.83	Zone2	Huntsville AL-TN
BOAZALMA	\$357,990.08	\$280,266.41	\$77,723.66	Zone2	Huntsville AL-TN
BRPTALMA	(\$669,995.58)	(\$384,644.89)	(\$285,350.70)	Zone2	Huntsville AL-TN
FTPYALMA	\$488,691.70	\$337,266.62	\$151,425.09	Zone2	Huntsville AL-TN
GTVLALNM	\$314,090.59	\$126,250.71	\$187,839.88	Zone2	Huntsville AL-TN
HZGRALMA	\$237,185.41	\$227,124.52	\$10,060.88	Zone2	Huntsville AL-TN
	\$2,711,977.73	\$2,000,250.60	\$711,727.13		
ATHNALER	(\$117,631.98)	(\$104,238.38)	(\$13,393.60)	Zone3	Huntsville AL-TN
GRLYALMA	\$33,027.25	\$48,081.46	(\$15,054.21)	Zone3	Huntsville AL-TN
STSNALMA	(\$1,260,169.36)	(\$677,624.40)	(\$582,544.96)	Zone3	Huntsville AL-TN
	(\$1,344,774.09)	(\$733,781.31)	(\$610,992.78)		
DMPLALMA	\$123,906.04	\$92,130.29	\$31,775.75	Zone2	Meridian MS-AL
EUTWALBO	(\$12,324.64)	(\$12,324.64)	\$0.00	Zone3	Meridian MS-AL
EUTWALMA	\$39,579.23	\$66,479.22	(\$26,899.99)	Zone3	Meridian MS-AL
LNDNALMA	(\$178,065.85)	(\$159,472.77)	(\$18,593.08)	Zone3	Meridian MS-AL
LVTNALLA	(\$18,927.00)	(\$13,184.37)	(\$5,742.63)	Zone3	Meridian MS-AL
YORKALMA	(\$19,099.96)	\$4,803.42	(\$23,903.38)	Zone3	Meridian MS-AL
	(\$188,838.23)	(\$113,699.14)	(\$75,139.09)		
FRHPALMA	\$859,680.84	\$668,280.28	\$191,400.57	Zone1	Mobile AL
MOBLALAP	\$1,132,738.88	\$897,319.44	\$235,419.43	Zone1	Mobile AL
MOBLALAZ	\$1,576,488.42	\$598,081.51	\$978,406.92	Zone1	Mobile AL
MOBLALBF	\$77,275.23	\$42,169.41	\$35,105.82	Zone1	Mobile AL
MOBLALOS	\$2,527,502.37	\$1,548,516.40	\$978,985.98	Zone1	Mobile AL
MOBLALPR	\$1,128,645.70	\$953,309.58	\$175,336.12	Zone1	Mobile AL
MOBLALSF	\$1,086,499.55	\$786,439.00	\$300,060.55	Zone1	Mobile AL
MOBLALSH	\$2,061,486.24	\$1,287,336.89	\$774,149.35	Zone1	Mobile AL
MOBLALSK	\$2,155,068.41	\$1,043,161.45	\$1,111,906.96	Zone1	Mobile AL
MOBLALTH	\$366,018.21	\$273,843.94	\$92,174.27	Zone1	Mobile AL
	\$12,971,403.87	\$8,098,457.90	\$4,872,945.97		
BLFALMA	\$18,904.61	\$20,217.74	(\$1,313.13)	Zone2	Mobile AL
BRTOALMA	\$326,932.28	\$205,536.04	\$121,396.24	Zone2	Mobile AL
MOBLALSA	\$574,119.53	\$434,343.74	\$139,775.79	Zone2	Mobile AL
MOBLALSE	\$456,175.09	\$433,580.82	\$22,594.27	Zone2	Mobile AL
	\$1,376,131.52	\$1,093,678.34	\$282,453.17		
BYMNALMA	\$403,552.74	\$434,658.30	(\$31,105.56)	Zone3	Mobile AL
CTRNALNM	\$12,182.83	\$34,714.65	(\$22,531.82)	Zone3	Mobile AL
EVRGALMA	\$21,340.31	\$19,520.26	\$1,820.05	Zone3	Mobile AL
FMTNALMT	(\$111,771.34)	(\$94,321.41)	(\$17,449.93)	Zone3	Mobile AL

Wire Center	Net Present Value	NPV for Mass Market	NPV for Enterprise	UNE Zone	CEA
JCSNALNM	\$94,181.68	\$132,831.99	(\$38,650.30)	Zone3	Mobile AL
MCINALMA	(\$74,235.99)	(\$60,069.95)	(\$14,166.04)	Zone3	Mobile AL
MTVRALMA	(\$11,519.98)	(\$9,138.14)	(\$2,381.83)	Zone3	Mobile AL
THVLALMA	(\$5,716.51)	\$56,428.06	(\$62,144.57)	Zone3	Mobile AL
	\$328,013.74	\$514,623.75	(\$186,610.01)		
MTGMALDA	\$3,615,917.97	\$2,157,719.78	\$1,458,198.19	Zone1	Montgomery AL
MTGMALMT	\$2,784,664.60	\$1,384,223.28	\$1,400,441.32	Zone1	Montgomery AL
MTGMALNO	\$1,777,876.42	\$1,271,135.38	\$506,741.04	Zone1	Montgomery AL
	\$8,178,458.99	\$4,813,078.43	\$3,365,380.56		
MTGMALMB	\$259,035.73	\$228,479.30	\$30,556.42	Zone2	Montgomery AL
PRVLALMA	\$842,637.22	\$602,245.01	\$240,392.21	Zone2	Montgomery AL
SELMALMT	\$1,093,967.99	\$717,946.36	\$376,021.62	Zone2	Montgomery AL
TROYALMA	\$448,597.73	\$328,157.95	\$120,439.77	Zone2	Montgomery AL
WTMPALMA	\$532,879.95	\$381,618.75	\$151,261.20	Zone2	Montgomery AL
	\$3,177,118.61	\$2,258,447.38	\$918,671.23		
FTDPALMA	(\$93,532.65)	(\$81,497.62)	(\$12,035.03)	Zone3	Montgomery AL
HLVIALMA	\$28,963.93	\$30,137.31	(\$1,173.38)	Zone3	Montgomery AL
MARNALNM	\$63,129.05	\$85,913.08	(\$22,784.03)	Zone3	Montgomery AL
UNTWALNM	(\$47,278.92)	(\$24,901.87)	(\$22,377.05)	Zone3	Montgomery AL
	(\$48,718.59)	\$9,650.89	(\$58,369.48)		
TSCLALMT	\$3,294,996.92	\$2,072,522.54	\$1,222,474.38	Zone1	Tuscaloosa AL
TSCLALDH	\$983,184.54	\$660,681.10	\$322,503.44	Zone2	Tuscaloosa AL
BSMRALBU	\$22,283.28	\$34,393.64	(\$12,110.36)	Zone3	Tuscaloosa AL
GNBOALMA	\$90,178.73	\$66,500.91	\$23,677.82	Zone3	Tuscaloosa AL
TSCLALNO	(\$24,574.37)	(\$15,421.14)	(\$9,153.23)	Zone3	Tuscaloosa AL
	87,887.64	85,473.41	2,414.23		

**EXHIBIT 11**

NPV for Mass Market

	(a)	(b)	(c)	(d)	(e)
<b>WCs with Negative Net Present Value</b>	<b>138</b>	<b>144</b>	<b>1</b>	<b>1</b>	<b>1</b>
	10% MS, Medium Penetration, 14.01% capcost, 6.5% churn, \$53.70 revenue, \$130 cust acquisition	10% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$130 cust acquisition	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$130 cust acquisition	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$140 cust acquisition, 1.1 CLEC purchasing power, medium CLEC size	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$140 cust acquisition, 1.2 CLEC purchasing power, small CLEC size
Wire Center					
ALBSALMA	(\$659,817)	(\$333,314)	\$42,896	\$238,338	\$278,957
ALCYALMT	(\$7,718,994)	(\$658,935)	\$73,840	\$415,899	\$145,312
ALVLALMA	(\$5,624,725)	(\$527,806)	\$68,005	\$385,382	\$277,337
ANTNALLE	(\$8,930,322)	(\$694,672)	\$70,267	\$400,093	\$137,658
ANTNALMT	(\$1,656,687)	(\$308,168)	\$104,880	\$589,976	\$205,275
ANTNALOX	(\$6,874,662)	(\$614,087)	\$74,746	\$870,551	\$296,634
ATHNALER	(\$8,169,344)	(\$586,076)	\$67,633	\$374,957	\$126,516
ATHNALMA	(\$11,266,699)	(\$994,908)	\$105,939	\$613,685	\$217,745
ATTLALNM	(\$4,276,432)	(\$366,974)	\$42,266	\$241,701	\$84,614
AUBNALMA	(\$8,691,431)	(\$827,670)	\$77,780	\$461,507	\$167,346
BLFNALMA	(\$3,393,526)	(\$251,659)	\$29,865	\$170,100	\$57,916
BOAZALMA	(\$7,885,599)	(\$638,773)	\$63,752	\$545,624	\$186,407
BRHMALCH	(\$3,428,591)	(\$399,101)	\$45,744	\$258,528	\$195,983
BRHMALCP	(\$2,681,397)	(\$464,161)	\$60,239	\$349,181	\$129,759
BRHMALEL	(\$853,683)	(\$209,263)	\$30,016	\$442,570	\$154,288
BRHMALEN	\$1,399,117	(\$154,499)	\$31,333	\$187,640	\$74,708
BRHMALEW	(\$2,494,591)	(\$276,104)	\$57,412	\$321,648	\$111,965
BRHMALFO	(\$2,096,365)	(\$260,336)	\$32,680	\$187,652	\$68,529
BRHMALFS	(\$3,670,558)	(\$317,631)	\$28,442	\$156,211	\$54,741
BRHMALHW	\$1,127,726	(\$102,842)	\$85,749	\$470,324	\$165,412
BRHMALMT	\$6,125,879	\$165,975	\$77,972	\$413,712	\$149,792
BRHMALOM	(\$1,651,152)	(\$339,151)	\$41,543	\$243,784	\$93,089
BRHMALOX	(\$564,398)	(\$139,311)	\$46,854	\$262,137	\$92,138
BRHMALRC	(\$455,187)	(\$240,800)	\$116,147	\$646,100	\$225,184
BRHMALTA	(\$1,597,918)	(\$231,025)	\$27,422	\$331,778	\$115,926
BRHMALVA	(\$1,467,191)	(\$388,794)	\$48,960	\$272,004	\$298,902
BRHMALWE	\$555,943	(\$134,498)	\$28,987	\$172,909	\$66,353
BRHMALWL	\$415,390	(\$90,735)	\$56,312	\$310,241	\$109,076
BRPTALMA	(\$15,988,760)	(\$1,096,513)	\$151,932	\$907,247	\$297,289
BRTOALMA	(\$6,881,000)	(\$545,348)	\$55,155	\$317,952	\$111,099
BSMRALBP	(\$5,867,563)	(\$415,485)	\$28,872	\$162,885	\$55,005
BSMRALBU	(\$6,749,968)	(\$509,489)	\$58,159	\$330,457	\$113,170
BSMRALHT	(\$11,780,833)	(\$991,010)	\$102,468	\$585,140	\$204,141
BSMRALMA	\$29,734	(\$327,368)	\$40,582	\$236,705	\$94,351
BYMNALMA	(\$8,063,345)	(\$651,023)	\$67,299	\$385,605	\$135,234
CALRALMA	(\$3,411,995)	(\$277,184)	\$32,465	\$183,065	\$63,689
CHBGALMA	(\$3,653,280)	(\$284,999)	\$36,116	\$205,184	\$70,910
CHLSALMA	(\$6,495,625)	(\$488,500)	\$54,872	\$309,762	\$106,159
CLANALMA	(\$15,639,697)	(\$1,180,439)	\$113,825	\$644,022	\$220,644
CLMBALMA	(\$4,842,579)	(\$407,176)	\$43,385	\$245,590	\$85,737
CLMNALFA	(\$12,743,991)	(\$928,820)	\$97,617	\$554,263	\$188,649
CLMNALJC	(\$11,820,653)	(\$855,738)	\$91,487	\$519,502	\$176,565
CLMNALMA	(\$12,829,384)	(\$1,088,301)	\$110,149	\$633,533	\$223,723

NPV for Mass Market

	(a)	(b)	(c)	(d)	(e)
<b>WCs with Negative Net Present Value</b>	<b>138</b>	<b>144</b>	<b>1</b>	<b>1</b>	<b>1</b>
	10% MS, Medium Penetration, 14.01% capcost, 6.5% churn, \$53.70 revenue, \$130 cust acquisition	10% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$130 cust acquisition	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$130 cust acquisition	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$140 cust acquisition, 1.1 CLEC purchasing power, medium CLEC size	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$140 cust acquisition, 1.2 CLEC purchasing power, small CLEC size
Wire Center					
CNVIALMA	(\$4,817,155)	(\$371,374)	\$41,189	\$232,350	\$80,160
CRDVALMA	(\$3,053,441)	(\$236,983)	\$28,719	\$163,733	\$55,835
CRHLALNM	(\$4,048,104)	(\$305,052)	\$40,950	\$231,760	\$79,486
CRLDALMA	(\$6,554,930)	(\$466,212)	\$49,298	\$280,941	\$95,417
CTRNALNM	(\$5,765,564)	(\$428,596)	\$49,519	\$283,019	\$97,204
CYTNALMA	(\$5,668,882)	(\$400,205)	\$44,601	\$254,175	\$86,307
DCTRALMT	(\$3,254,983)	(\$586,763)	\$202,191	\$1,152,882	\$403,426
DDVLALMA	(\$13,416,168)	(\$983,125)	\$96,509	\$543,931	\$185,100
DMPLALMA	(\$6,926,628)	(\$533,195)	\$82,432	\$467,401	\$159,119
DORAALMA	(\$8,059,141)	(\$636,041)	\$66,339	\$376,721	\$154,640
EUFLALMA	(\$7,174,579)	(\$587,886)	\$63,203	\$361,898	\$235,780
EUTWALBO	(\$1,252,369)	(\$91,960)	\$10,239	\$57,540	\$19,438
EUTWALMA	(\$5,812,950)	(\$434,899)	\$52,050	\$294,388	\$100,813
EVRGALMA	(\$6,550,154)	(\$483,455)	\$49,981	\$285,888	\$98,124
FLRNALMA	(\$18,022,032)	(\$1,534,610)	\$157,983	\$914,215	\$321,857
FMTNALMT	(\$8,345,776)	(\$606,547)	\$63,464	\$363,223	\$123,988
FRHPALMA	(\$6,825,550)	(\$612,486)	\$110,967	\$630,737	\$218,744
FTDPALMA	(\$6,238,811)	(\$442,470)	\$51,035	\$194,820	\$65,901
FTPYALMA	(\$13,213,091)	(\$521,630)	\$89,475	\$502,575	\$171,577
GDSDALHS	(\$9,030,092)	(\$726,678)	\$74,400	\$422,645	\$146,375
GDSDALMT	(\$2,470,831)	(\$358,399)	\$108,213	\$606,052	\$210,535
GDSDALRD	(\$7,271,968)	(\$598,281)	\$60,341	\$343,487	\$119,966
GDWRALMA	(\$4,290,002)	(\$309,706)	\$35,335	\$199,130	\$67,174
GNBOALMA	(\$5,924,946)	(\$448,194)	\$48,439	\$275,378	\$94,748
GRDLALNM	(\$2,607,418)	(\$286,830)	\$34,646	\$328,283	\$114,272
GRLYALMA	(\$6,480,259)	(\$488,468)	\$59,459	\$339,528	\$116,505
GTVLALNM	(\$8,217,160)	(\$645,095)	\$83,628	\$470,173	\$160,531
GYVLALNM	(\$6,267,854)	(\$496,481)	\$54,895	\$310,012	\$107,013
HLVIALMA	(\$3,827,304)	(\$284,534)	\$38,849	\$222,161	\$64,532
HNVIALLW	(\$3,275,378)	(\$472,898)	\$70,853	\$413,938	\$152,172
HNVIALMT	\$483,229	(\$229,109)	\$130,672	\$740,954	\$261,372
HNVIALPW	(\$3,668,786)	(\$533,255)	\$69,201	\$417,213	\$155,122
HNVIALRA	\$7,924	\$531	(\$43)	(\$324)	(\$104)
HNVIALRW	(\$1,294,616)	(\$105,332)	\$10,899	\$61,649	\$21,332
HNVIALUN	(\$2,086,203)	(\$349,198)	\$46,010	\$704,964	\$246,141
HNVLALBR	(\$6,841,426)	(\$496,031)	\$57,352	\$328,870	\$111,130
HNVLALNM	(\$6,349,482)	(\$478,860)	\$55,075	\$314,896	\$108,152
HRBOALOM	(\$5,153,018)	(\$363,997)	\$26,708	\$151,652	\$51,279
HRTSALNM	(\$7,800,257)	(\$648,734)	\$73,589	\$424,130	\$148,389
HRTSALPE	(\$6,570,002)	(\$473,972)	\$53,621	\$303,756	\$102,640
HZGRALMA	(\$8,430,560)	(\$683,243)	\$75,978	\$433,223	\$150,533
JCSNALNM	(\$8,223,241)	(\$621,813)	\$63,883	\$366,873	\$126,595
JCVLALMA	(\$8,566,323)	(\$680,261)	\$69,816	\$393,842	\$136,138

NPV for Mass Market

	(a)	(b)	(c)	(d)	(e)
<b>WCs with Negative Net Present Value</b>	<b>138</b>	<b>144</b>	<b>1</b>	<b>1</b>	<b>1</b>
	10% MS, Medium Penetration, 14.01% capcost, 6.5% churn, \$53.70 revenue, \$130 cust acquisition	10% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$130 cust acquisition	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$130 cust acquisition	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$140 cust acquisition, 1.1 CLEC purchasing power, medium CLEC size	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$140 cust acquisition, 1.2 CLEC purchasing power, small CLEC size
Wire Center					
JSPRALMT	(\$9,699,279)	(\$859,826)	\$91,501	\$512,848	\$180,766
KLLNALMA	(\$12,088,746)	(\$912,163)	\$97,769	\$558,676	\$191,536
LFYTALRS	(\$4,040,109)	(\$307,770)	\$36,465	\$212,379	\$73,212
LGTNALMA	(\$8,874,548)	(\$641,289)	\$72,550	\$412,521	\$140,334
LNDNALMA	(\$8,214,974)	(\$580,061)	\$59,763	\$339,843	\$115,059
LVTNALLA	(\$5,510,821)	(\$405,007)	\$42,112	\$241,985	\$82,711
LXTNALMA	(\$3,742,057)	(\$271,099)	\$30,677	\$173,618	\$58,736
MARNALNM	(\$4,099,064)	(\$307,929)	\$37,615	\$214,758	\$73,948
MCINALMA	(\$4,392,307)	(\$307,409)	\$20,225	\$114,849	\$38,841
MDSNALNM	(\$37,101,384)	(\$2,587,081)	\$236,164	\$1,352,210	\$453,777
MNFDALMA	(\$2,323,021)	(\$173,552)	\$16,662	\$96,038	\$32,609
MNTVALNM	(\$4,922,374)	(\$392,418)	\$45,344	\$256,168	\$88,568
MOBLALAP	(\$6,043,802)	(\$592,579)	\$119,778	\$685,389	\$238,470
MOBLALAZ	(\$754,011)	(\$149,115)	\$49,494	\$279,170	\$99,036
MOBLALBF	(\$1,778,309)	(\$140,685)	\$12,973	\$74,139	\$25,655
MOBLALOS	(\$5,159,801)	(\$663,734)	\$78,313	\$1,046,776	\$366,014
MOBLALPR	(\$4,269,822)	(\$488,924)	\$59,509	\$356,031	\$130,490
MOBLALSA	(\$9,076,566)	(\$760,080)	\$81,152	\$473,225	\$166,611
MOBLALSE	(\$11,271,437)	(\$928,193)	\$99,855	\$577,296	\$201,988
MOBLALSF	(\$5,086,289)	(\$495,482)	\$104,618	\$597,622	\$207,786
MOBLALSH	(\$8,723,414)	(\$884,368)	\$187,884	\$1,078,205	\$375,018
MOBLALSK	(\$7,806,673)	(\$780,470)	\$154,717	\$887,971	\$309,213
MOBLALTH	(\$3,218,355)	(\$291,663)	\$47,479	\$273,025	\$95,010
MOLTALNM	(\$12,248,070)	(\$929,285)	\$94,225	\$537,257	\$184,616
MPVLALMA	(\$5,629,393)	(\$406,556)	\$46,636	\$264,234	\$89,227
MTGMALDA	(\$9,331,001)	(\$1,084,368)	\$253,188	\$1,452,757	\$506,298
MTGMALMB	(\$7,769,938)	(\$620,118)	\$58,206	\$335,895	\$117,203
MTGMALMT	(\$3,744,201)	(\$537,412)	\$137,875	\$792,121	\$278,399
MTGMALNO	(\$8,609,289)	(\$882,028)	\$86,149	\$512,618	\$321,868
MTVRALMA	(\$5,207,366)	(\$377,352)	\$44,668	\$255,578	\$95,139
OHTCALMA	(\$5,527,149)	(\$411,296)	\$50,484	\$286,169	\$97,825
OPLKALMT	(\$11,186,022)	(\$962,435)	\$105,041	\$606,507	\$213,696
PDMTALMA	(\$4,308,067)	(\$340,416)	\$42,565	\$245,796	\$84,891
PHCYALFM	(\$10,685,633)	(\$761,819)	\$95,983	\$557,339	\$186,258
PHCYALMA	(\$50,580,939)	(\$3,747,610)	\$469,505	\$2,778,848	\$925,202
PNSNALMA	(\$8,905,857)	(\$771,821)	\$81,528	\$462,793	\$162,270
PRSHALNM	(\$4,753,564)	(\$348,141)	\$41,872	\$237,383	\$80,164
PRVLALMA	(\$10,614,320)	(\$906,886)	\$85,594	\$495,014	\$175,296
RDBAALMA	(\$4,124,066)	(\$314,865)	\$40,720	\$231,981	\$80,023
RLVLALMA	(\$8,236,592)	(\$665,975)	\$74,003	\$425,001	\$147,995
RRVLALMA	(\$5,291,148)	(\$406,415)	\$51,883	\$299,229	\$103,065
SELMALMT	(\$14,798,307)	(\$1,234,563)	\$112,918	\$653,156	\$230,253
SHFDALMT	(\$2,745,289)	(\$408,476)	\$58,262	\$767,796	\$267,229

NPV for Mass Market

	(a)	(b)	(c)	(d)	(e)
<b>WCs with Negative Net Present Value</b>	<b>138</b>	<b>144</b>	<b>1</b>	<b>1</b>	<b>1</b>
	10% MS, Medium Penetration, 14.01% capcost, 6.5% churn, \$53.70 revenue, \$130 cust acquisition	10% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$130 cust acquisition	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$130 cust acquisition	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$140 cust acquisition, 1.1 CLEC purchasing power, medium CLEC size	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, \$53.70 revenue, \$140 cust acquisition, 1.2 CLEC purchasing power, small CLEC size
<b>Wire Center</b>					
STSNALMA	(\$28,749,380)	(\$1,966,048)	\$262,893	\$1,576,503	\$517,139
SYLCALMT	(\$8,319,763)	(\$716,646)	\$80,589	\$457,110	\$159,787
THVLALMA	(\$6,349,400)	(\$475,513)	\$52,134	\$296,457	\$101,913
TLDGALMA	(\$6,062,045)	(\$527,614)	\$56,819	\$323,885	\$114,063
TLDGALRF	(\$6,691,260)	(\$485,678)	\$51,061	\$288,008	\$97,233
TROYALMA	(\$7,910,719)	(\$633,021)	\$62,209	\$352,831	\$210,745
TSCLALDH	(\$13,467,781)	(\$1,156,964)	\$112,619	\$642,653	\$225,746
TSCLALMT	(\$502,754)	(\$439,261)	\$49,935	\$1,116,454	\$389,932
TSCLALNO	(\$24,274,665)	(\$1,833,093)	\$183,684	\$1,038,982	\$355,007
TSKGALMA	(\$11,421,522)	(\$860,066)	\$83,091	\$473,864	\$162,837
TWCKALMA	(\$8,698,113)	(\$621,324)	\$70,630	\$401,719	\$136,290
UNTWALNM	(\$5,245,940)	(\$374,017)	\$47,587	\$271,268	\$91,335
VNCNALMA	(\$6,048,020)	(\$446,108)	\$51,950	\$294,133	\$100,442
WBTNALNM	(\$6,533,537)	(\$489,226)	\$53,192	\$301,266	\$103,143
WRRRALNM	(\$7,749,917)	(\$661,642)	\$70,565	\$399,369	\$139,502
WTMPALMA	(\$9,719,379)	(\$798,142)	\$69,747	\$402,953	\$141,958
YORKALMA	(\$4,756,877)	(\$351,637)	\$44,093	\$250,540	\$85,596

**BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION**

**In Re: Implementation of the Federal                    )**  
**Communications Commission's Triennial            )** **Docket No. 29054**  
**Review Order (Phase II – Local Circuit            )**  
**Switching)    )**

**REBUTTAL TESTIMONY OF**

**James Webber**

On Behalf of

**MCIMetro Access Transmission Services, LLC And**  
**MCI WORDLCOM Communications, Inc.**

March 5, 2004

**NON-PROPRIETARY VERSION**

**CONFIDENTIAL DATA REDACTED**

**EXHIBIT**

D

1    **I.       INTRODUCTION**

2  
3    **Q.       PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE**  
4       **RECORD.**

5    A.     My name is James D. Webber and my business address is: QSI Consulting, 4515  
6       Barr Creek Lane, Naperville, Illinois 60564.

7  
8    **Q.       BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

9    A.     I am employed by QSI Consulting, Inc. as a senior consultant within the firm's  
10       Telecommunication Division.

11  
12   **Q.       ARE YOU THE SAME JAMES D. WEBBER WHO FILED DIRECT**  
13       **TESTIMONY IN THESE PROCEEDINGS?**

14   A.     Yes, I am.

15  
16   **Q.       ON WHOSE BEHALF WAS THIS TESTIMONY PREPARED?**

17   A.     This testimony was prepared on behalf of MCImetro Access Transmission  
18       Services, LLC and MCI WORLDCOM Communications, Inc. (collectively  
19       "MCI").

20  
21   **Q.       WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

22   A.     My testimony responds to various BellSouth witnesses who discuss: (1) the  
23       geographic areas that would be affected by accepting BellSouth's proposal that

1 the Commission enter a finding of no impairment; (2) EELs; and, (3) unbundling  
2 of IDLC based loops.

3  
4 **II. SUMMARY OF CONCLUSIONS**

5  
6 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS.**

7 A. A brief summary of the issues addressed in my rebuttal is as follows:

- 8
- BellSouth's proposal to eliminate unbundled local switching ("ULS")  
9 from certain wire centers throughout the state would affect virtually all of  
10 the UNE-P lines in its serving territory. Approximately \*\* \*\* percent  
11 of MCI's UNE-P based end user lines are provisioned within the wire  
12 centers where BellSouth claims CLECs are not impaired without access to  
13 ULS. Approximately 163,824, or 94 percent, of all CLEC UNE-P lines  
14 are in these areas. A finding of "no impairment" would require these lines  
15 to be migrated from UNE-P to UNE-L, and, given the operational  
16 impairment that in fact exists, would destroy UNE-P based mass market  
17 local competition in this state.

- 18
- Neither BellSouth's individual hot cut process nor its batch ordering  
19 process permit CLECs to transfer retail or UNE-P lines to EELs. The  
20 Commission should require BellSouth to accommodate EELS in its  
21 individual hot cut process and its batch process.  
22  
23

- BellSouth's network contains a significant percentage of IDLC based loops, which means it is critical that BellSouth have processes that seamlessly migrate to UNE-L customers that are served on IDLC fed loops. BellSouth has failed to demonstrate that it can do so.

**III. BELLSOUTH'S PROPOSAL TO REMOVE ULS FROM NUMEROUS WIRE CENTERS WILL AFFECT APPROXIMATELY 94% OF ALL UNE-P BASED END USER LINES THROUGHOUT THE STATE**

**Q. HAVE YOU ANALYZED THE IMPACT OF REMOVING ULS IN THE GEOGRAPHIC AREAS BELLSOUTH PROPOSES?**

A. Yes. BellSouth alleges that requesting carriers are not impaired without access to ULS when attempting to serve mass market customers in 26 of the 34 "markets" it has proposed this Commission define in these proceedings. Ms. Tipton claims that ULS should be removed from 3 of these areas based upon the alleged presence of "triggering" carriers, while Dr. Aron and other BellSouth witnesses claim ULS should be removed in 23 additional areas based upon the "potential" that carriers could deploy facilities to serve the mass market in those areas.<sup>1</sup> Denying CLECs access to ULS in these areas would affect virtually all of the UNE-P lines in BellSouth's service territory. For example, more than \*\* \*\*, or approximately \*\* \*\* percent, of MCI's UNE-P lines are in wire centers within the 26 areas where BellSouth claims there is no impairment. And approximately

---

<sup>1</sup> See Exhibit PAT-3. See also Dr. Aron's Direct Testimony at page 6.

1 163,824, or 94 percent, of all CLEC UNE-P lines are served from within these  
2 areas.<sup>2</sup>

3  
4 **Q. ARE CLECS CURRENTLY ABLE TO ACCESS CUSTOMERS WITHOUT**  
5 **ULS?**

6 A. No. Setting aside questions regarding operational issues and the economic  
7 practicability of serving residential and smaller business customers via UNE  
8 loops, CLECs cannot currently reach their current customer base throughout most  
9 of the state without access to ULS. MCI's local customers, for example, are  
10 spread throughout wire centers across the state, but MCI has collocations serving  
11 only in a relatively small number of these areas. Without collocation or some  
12 other method of physically accessing customer loops, such as EELs (with  
13 concentration, if requested) coupled with a seamless hot cut process capable of  
14 handling large volumes of both inbound and outbound customer movement, MCI  
15 cannot offer services to most of its embedded base of customers without access to  
16 ULS. CLECs, including MCI, thus are currently dependent on ULS to serve the  
17 mass market.

18  
19 **Q. IN HOW MANY OF THE WIRE CENTERS FOR WHICH BELL SOUTH**  
20 **CLAIMS "NO IMPAIRMENT" IS MCI CURRENTLY COLLOCATED?**

21 A. Exhibit JDW 4 identifies the wire centers where MCI currently provides UNE-P  
22 based services and where BellSouth claims CLECs are not impaired without ULS.

---

<sup>2</sup> Total UNE-P based line counts are taken from BellSouth's response to AT&T Interrogatory No. 55 in Georgia PSC Docket No. 17749-U.

1        There are approximately \*\*    \*\* such wire centers. The map also identifies \*\*  
2        \*\* wire centers in which MCI is currently collocated, leaving \*\*    \*\* wire  
3        centers from which MCI could not access its customers unless it were able to  
4        build out additional collocation and transport facilities or gain access to EELs  
5        (with concentration, if requested) coupled with an efficient batch hot cut process.  
6

7        **Q.    HAS BELLSOUTH CLAIMED THAT TRANSPORT TO AND FROM ANY**  
8        **OF THOSE \*\*    \*\* WIRE CENTERS SHOULD BE UNAVAILABLE TO**  
9        **REQUESTING CARRIERS?**

10      A.    In all likelihood, yes. BellSouth is expected to identify a number of transport  
11      routes throughout the state where it will seek to no longer be required to provide  
12      access to its network. BellSouth probably will claim that it should not have to  
13      provide transport from some of those \*\*    \*\* wire centers. If BellSouth were to  
14      prevail with respect to any of these routes, it would no longer be possible for  
15      CLECs to use EELs or BellSouth unbundled transport to support mass market  
16      customers from those wire centers.  
17

18      **IV.    BELLSOUTH FAILS TO DEMONSTRATE THAT CLECS CAN USE**  
19      **EELS TO SUPPORT MASS MARKET UNE-L**

20  
21      **Q.    DOES THE BACE MODEL RELY UPON THE AVAILABILITY OF**  
22      **EELS?**

1 A. Yes. In fact, according to BellSouth witness Milner, two of the three architectures  
2 BellSouth's BACE model assumes CLECs will rely on to access customers  
3 assume they are able to use EEL connectivity either in lieu of collocation and  
4 transport facilities or in coordination with such facilities.

5  
6 **Q. ARE EELS WIDELY USED TODAY IN BELL SOUTH'S SERVICE**  
7 **TERRITORY?**

8 A. No. By BellSouth's own admission there are only 125 EELs comprised of DS0  
9 loops throughout its service territory in this state. (See BellSouth's response to  
10 MCI Interrogatory 109.) Thus, the BACE model relies on network architectures  
11 and processes that are completely unproven in the market.

12  
13 **Q. DOES BELL SOUTH'S INDIVIDUAL OR BATCH HOT CUT PROCESS**  
14 **ALLOW CLECS TO TRANSFER CLEC UNE-P LINES OR BELL SOUTH**  
15 **RETAIL LINES TO EELS?**

16 A. No. BellSouth has acknowledged that it does not currently provide individual or  
17 batch migrations of existing UNE-P or DS0 loops to EELs. Although BellSouth  
18 has stated that it plans to implement processes that would support such  
19 migrations, the target implementation date is July 2004 and BellSouth has not  
20 provided any significant details on what the processes will be.

1   **Q.    DOES THE FCC's *TRO* PROVIDE ANY GUIDANCE REGARDING**  
2       **CLECS' USE OF EELS TO SERVE MASS MARKET CUSTOMERS?**

3   A.   Yes. For example, at paragraph 492 of the *TRO*, the FCC states that EELs can  
4       minimize collocation costs and increase the geographic reach of competitive  
5       LECs, thereby facilitating the expansion of competition based on UNE-L  
6       strategies in some markets.

7  
8   **Q.    HOW SHOULD BELL SOUTH'S PROCESSES AND REQUIREMENTS BE**  
9       **CHANGED TO MAKE EELS USEFUL TO CLECS?**

10  A.   As I discussed in my Direct Testimony, BellSouth should be required to provide  
11       concentrated EELs that would enable CLECs to lease only the transport they need  
12       to support their customers. Moreover, to make EELs useful, CLECs should be  
13       allowed to submit an LSR that requests a loop housed in BellSouth Central Office  
14       A, for example, to be "hot cut" to a collocation facility (designated by a specific  
15       CFA) in Central Office B. When BellSouth receives such an order, it should  
16       provision on the CLEC's behalf, as part of its hot cut pre-wiring function, a DS0  
17       EEL extending from Central Office A to the CLEC's CFA in Central Office B.  
18       All ANI testing should be completed via the DS0 EEL. On the day of the cut,  
19       BellSouth should cut the requested loop to the EEL so that CLEC dial tone from  
20       its collocation in Central Office B is provided to the customer's loop located in  
21       Central Office A.

1   **V.     OBTAINING ACCESS TO IDLC BASED LOOPS INCREASES**  
2       **PROVISIONING INTERVALS AND COSTS AND DECREASES SERVICE**  
3       **QUALITY**

4  
5   **Q.     WHY IS ACCESS TO IDLC LOOPS SUCH A SIGNIFICANT ISSUE?**

6   A.     There are approximately on half of a million IDLC-fed loops in BellSouth's  
7       Alabama service territory. In response to discovery, BellSouth stated that  
8       approximately one quarter of all loops in are provisioned over IDLC based  
9       facilities. Exhibit AH-1 shows that IDLC lines comprise up to 50 percent of lines  
10      in the company's top 20 wire centers in the state.

11  
12   **Q.     BELLSOUTH LISTS EIGHT "ALTERNATIVE" METHODS OF**  
13       **PROVIDING ACCESS TO IDLC BASED LOOPS. HAS BELLSOUTH**  
14       **PROVIDED SUFFICIENT INFORMATION IN ITS TESTIMONY FOR**  
15       **THE COMMISSION TO EVALUATE THESE ALTERNATIVES?**

16   A.     No. BellSouth witness Ainsworth simply lists the options that BellSouth claims  
17       are available to CLECs without indicating the extent to which each of these  
18       alternatives has been previously deployed. Nor does he provide any operational  
19       statistics indicating, for example, whether, or to what extent, these alternatives  
20       require lengthened installation intervals, "designed" (or SL2) loop deployment,  
21       and added costs. Additionally, it is unclear whether any of the alternatives will  
22       necessitate CLEC dispatches.

1    **Q.    BASED ON WHAT YOU KNOW NOW, ARE THERE PROBLEMS WITH**  
2       **BELLSOUTH'S APPROACH TO HANDLING IDLC LOOPS?**

3    A.    Yes. All of BellSouth's methods, except where the company transfers IDLC  
4       based loops to alternative home run copper loops (Alternative 1 and, potentially,  
5       Alternative 3), involve an additional analog to digital signal conversion that  
6       would degrade modem performance when, for example, customers dial up to the  
7       internet. Moreover, as BellSouth witness Ainsworth admits, many of these  
8       alternatives involve significant time and costs to implement, which ultimately  
9       impacts CLECs and their customers.

10  
11   **Q.    DO SOME OF BELLSOUTH'S ALTERNATIVES APPEAR TO BE**  
12       **SIMILAR TO METHODS MCI ADVOCATES?**

13   A.    Yes. Alternatives 5 and 6 appear to be at least superficially similar to an IDLC  
14       access method MCI has proposed. It is apparent, however, that BellSouth's  
15       methods are not the same as what MCI has proposed, because BellSouth's  
16       methods involve an additional analog to digital signal conversion, while MCI's do  
17       not require such a conversion.

18  
19   **Q.    THE FIRST ALTERNATIVE BELLSOUTH PROPOSES IS TO PROVIDE**  
20       **AN UNBUNDLED LOOP OVER COPPER FACILITIES TO THE**  
21       **EXTENT SUCH FACILITIES ARE AVAILABLE. WHAT CONCERNS**  
22       **DO YOU HAVE WITH THIS ACCESS METHOD?**

1 A. BellSouth's *Loop Technology Deployment Directives* call for increased use of  
2 fiber-fed IDLC systems throughout the company's operating territories, decreased  
3 reliance on copper facilities and to some extent the retirement of such facilities.  
4 Increasingly, copper will become scarce and the availability of Alternative 1 –  
5 which BellSouth asserts is the quickest and least expensive to implement -- will  
6 decrease, thus increasing the probability for delayed provisioning and increased  
7 costs. In one wire center, for example, where BellSouth expects to be providing  
8 UNE-P services to 5,509 lines by December 2004 and where it is currently  
9 providing 50% of such services over IDLC loops, it potentially could be requested  
10 to unbundle as many as 2,755 IDLC based loops. It is highly unlikely that  
11 BellSouth will have 2,755 spare copper loops in that one wire center alone to  
12 meet the CLECs' needs.

13  
14 **Q. DOES MR. AINSWORTH ADDRESS YOUR PREVIOUS CONCERN**  
15 **THAT PROVIDING UNBUNDLED LOOPS VIA UDLC FACILITIES**  
16 **WILL HARM SERVICE QUALITY AND PRECLUDE V.90, OR K56,**  
17 **MODEM CONNECTIVITY?**

18 A. Yes. Unfortunately, however, he states that the UDLC option as well as all other  
19 options offered by BellSouth – excluding those that involve re-assignment to  
20 copper facilities – will involve additional analog to digital (“A/D”) conversions  
21 and thereby negatively impact modem performance. BellSouth's *Loop*  
22 *Technology Deployment Directives* corroborates this conclusion, stating at

1 Section 9.2.5, for example, that “it must be noted that modem speeds for circuits  
2 on universal COT terminations will be lower than those on integrated DLC.”  
3

4 **Q. YOU STATED THAT ALL OF BELL SOUTH’S PROPOSED**  
5 **ALTERNATIVE METHODS, EXCEPT THOSE THAT EMPLOY HOME**  
6 **RUN COPPER LOOPS, WILL RESULT IN DEGRADED MODEM**  
7 **PERFORMANCE SERVICE. CAN DEGRADED SERVICE BE AVOIDED**  
8 **IN SOME CASES?**

9 A. Yes. It is likely that at least a few of the alternative options could be deployed in  
10 such a way to avoid multiple A/D conversions, thereby resolving the issue  
11 pertaining to degraded modem performance. Moreover, I have offered at least  
12 one additional option in my Direct Testimony that, if cooperatively deployed,  
13 could provide resolution of this issue. The Commission should require that  
14 BellSouth work with CLECs to resolve this issue and to provide for effective  
15 processes and procedures whereby IDLC based loops can be unbundled in a  
16 timely and efficient manner without service degrading results.  
17

18 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS WITH RESPECT**  
19 **TO UNBUNDLED LOOPS.**

20 A. The Commission should require that unbundled loops be provided on a timely  
21 basis, regardless of whether they are provided via copper or IDLC based facilities,  
22 without “changing” the facilities over which connectivity is currently provided  
23 unless spare copper facilities are readily and economically available such that end

1 user service quality will not be diminished after having received services via an  
2 unbundled loop. To the extent that BellSouth's proposed methods of unbundling  
3 IDLC loops would have the practical effect of providing CLEC end users with  
4 lesser capable loops, the Commission should maintain a finding of impairment  
5 while investigating more fully all unbundling options offered in these  
6 proceedings. Additional recommendations regarding the availability of copper  
7 facilities are identified in my Direct Testimony.

8  
9 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

10 **A.** Yes, it does.

**EXHIBIT 1**

**CONFIDENTIAL AND PROPRIETARY**

**FILED UNDER SEAL**

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

In Re: Implementation of the Federal       )  
Communications Commission's Triennial    )  
Review Order (Phase II – Local Circuit     )  
Switching)                                       )

Docket No. 29054

REBUTTAL TESTIMONY OF SHERRY LICHTENBERG

On Behalf Of

MCI WORLDCOM COMMUNICATIONS, INC.  
AND

MCIMETRO ACCESS TRANSMISSION SERVICES LLC

March 5, 2004

EXHIBIT

E

1 **Q. PLEASE STATE YOUR NAME, EMPLOYER AND TITLE.**

2 A. My name is Sherry Lichtenberg. I am currently employed by MCI as Senior  
3 Manager, Operational Support Systems Interfaces and Facilities Development.

4 **Q. ARE YOU THE SAME SHERRY LICHTENBERG WHO PROVIDED**  
5 **DIRECT TESTIMONY IN THIS DOCKET?**

6 A. Yes.

7 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS**  
8 **PROCEEDING?**

9 A. The purpose of my rebuttal testimony is to rebut the Direct Testimony of  
10 BellSouth witnesses Kenneth L. Ainsworth, Ronald M. Pate, Alfred A. Heartley,  
11 and Alphonso J. Varner.

12  
13 **Scalability of BellSouth's Systems**

14 **Q. WHY IS SCALABILITY AN ISSUE?**

15 A. BellSouth's testimony makes clear that its UNE-L provisioning processes are  
16 intensively manual. As explained below, moving from UNE-P to UNE-L would  
17 involve an exponential increase in UNE-L provisioning volumes. Manual  
18 processing of such volumes would give rise to concern even if they were to take  
19 place for a single project over a relatively short period, but in fact the manual  
20 handling would have to take place day in and day out, month in and month out in  
21 every affected Alabama wire center.

1 Q. WHAT IS THE RISK OF REQUIRING CLECS TO USE A  
2 PROVISIONING PROCESS THAT MAY FAIL TO WORK PROPERLY  
3 AT HIGH VOLUMES?

4 A. The immediate risk is there would be a large increase in human errors that would  
5 cause provisioning delays, customer outages and other service problems. Over  
6 the longer term, negative customer experience would harm CLECs and ultimately  
7 undermine local competition.

8 Q. SEVERAL BELLSOUTH WITNESSES EMPHASIZE ITS 271  
9 APPROVALS IN 2002 IN SUPPORT OF ITS UNE-L PROVISIONING  
10 PROCESSES. IS THIS A VALID POINT?

11 A. No. In its Triennial Review Order, the FCC rejected the argument that the 271  
12 approvals demonstrated that CLECs were not impaired without access to  
13 unbundled local switching. The FCC emphasized that UNE-L volumes would  
14 increase to levels much higher than were evaluated during the 271 process:

15 While incumbent LECs reference the Commission's determination  
16 in multiple section 271 orders that BOCs provision hot cuts at a  
17 level of quality that offers efficient competitors a meaningful  
18 opportunity to compete, and argue that performance data show that  
19 current hot cut performance is satisfactory, even as the number of  
20 hot cuts has increased, we find that the number of hot cuts  
21 performed by BOCs in connection with the section 271 process is  
22 not comparable to the number that incumbent LECs would need to  
23 perform if unbundled switching were not available for all customer  
24 locations served with voice-grade loops. In the states where  
25 section 271 authorization has been granted, unbundled local circuit  
26 switching has been available and, accordingly, the BOCs' hot cut  
27 performance has generally been limited. Moreover, *we find that*  
28 *the issue is not how well the process works currently with limited*  
29 *hot cut volumes, rather the issue identified by the record is an*  
30 *inherent limitation in the number of manual cut overs that can*  
31 *be performed, which poses a barrier to entry that is likely to make*  
32 *entry into a market uneconomic. . . . For those reasons, the*

1           *Commission's prior findings in section 271 orders do not support*  
2           *a finding here that competitive carriers would not be impaired if*  
3           *they were required to rely on the hot cut process to serve all mass*  
4           *market customers.*

5  
6           *(Triennial Review Order, ¶ 469 (footnotes omitted, emphasis added.))*

7   **Q.   DOES BELLSOUTH PRESENT EVIDENCE DEMONSTRATING THAT**  
8           **ITS SYSTEMS CAN HANDLE MASS MARKET VOLUMES OF UNE-L**  
9           **ORDERS?**

10   A.   No. BellSouth for the most part simply promises that it can scale its systems to  
11           handle higher volumes if called upon to do so. Such promises were unacceptable  
12           to the FCC and should be to this Commission as well. As the FCC stated: "We  
13           find . . . incumbent LECs' promises of future hot cut performance insufficient to  
14           support [an FCC] finding that the hot cut process does not impair the ability of a  
15           requesting carrier to provide the service it seeks to offer without at least some sort  
16           of unbundled circuit switching." *(Triennial Review Order, ¶ 469 n.1437.)*

17   **Q.   DOES MR. VARNER'S TESTIMONY CONCERNING BELLSOUTH'S**  
18           **PERFORMANCE METRICS SUPPORT BELLSOUTH'S CLAIM THAT**  
19           **ITS SYSTEMS ARE SCALABLE?**

20   A.   No. At best, Mr. Varner's testimony addresses BellSouth's performance with  
21           respect to the current low level of UNE-L orders. To make matters worse, his  
22           testimony does not give a clear picture of BellSouth's actual performance on  
23           UNE-L orders. For example, at page 19 of his testimony, he states that 85.92% of  
24           the "UNE Other" (non-UNE-P) LSRs met the flow through standard over a  
25           certain period. In fact, however, most UNE-L LSRs do not flow through  
26           BellSouth's systems, when LSRs that fall out for manual processing by design are

1 taken into account. Indeed, BellSouth recently acknowledged that for purposes of  
2 its force model, it assumed that only 37% of UNE-L LSRs would flow through its  
3 systems. In contrast, the flow through of UNE-P migration orders in Alabama  
4 from July 2002 to August 2003 ranged from 75.0% to 91.4%. (BellSouth  
5 response to AT&T First Interrogatory No. 32.)  
6

7 **Q. WHAT IS THE SIGNIFICANCE OF THE LOW FLOW THROUGH OF**  
8 **UNE-L ORDERS?**

9 A. Low flow through means that a significant number of UNE-L orders will fall out  
10 of the systems and must be processed manually by BellSouth's Local Carrier  
11 Service Center. Thus, not only are BellSouth's physical UNE-L hot cut processes  
12 (including the processes used to notify CLECs of the status of a cut) intensively  
13 manual, but its ordering processes are largely manual as well. Manual ordering  
14 processes compound the problems introduced by the manual provisioning  
15 processes, increasing still more the chances for human error and customer service  
16 outages and other problems.

17 **Q. HOW DO CURRENT UNE-L INSTALLATION INTERVALS COMPARE**  
18 **TO UNE-P INTERVALS?**

19 A. Regional installation intervals for 2 wire analog loops with LNP were 5.06 days  
20 for non-design loops and 5.32 days for design loops in October 2003. During that  
21 same period, comparable UNE-P installation intervals were 0.36 days for non-  
22 dispatch orders and 1.52 days where dispatch was required. (See October 2003  
23 report entitled "FOCI UNE and Non-Design Fully Mech Non-Dispatch SQM

(Region).”) Thus, even at current volumes UNE-L migrations take substantially longer than UNE-P migrations.

**Q. BELLSOUTH WITNESSES AINSWORTH AND PATE POINT TO THIRD PARTY TESTING AS EVIDENCE THAT BELLSOUTH’S SYSTEMS SUPPORTING UNE-L ARE ADEQUATE. DO YOU AGREE?**

A. No. Mr. Ainsworth refers to process and transaction testing of hot cuts (PPR-9 and TVV-4) at page 16 of his Direct Testimony, but both of the tests he refers to involved low volumes of orders, either issued by BearingPoint or a CLEC. In addition, the tests did not evaluate the ancillary processes necessary in a UNE-L environment, such as LNP, E911, and CLEC-to-CLEC migrations. At page 13 of his Direct Testimony, Mr. Pate refers to another test (TVV-2) done for normal, peak and stress volumes, but fails to note that the orders tested did not go through the physical provisioning process, meaning there were no actual hot cuts performed. Moreover, TVV-2 involved mostly orders that flowed through BellSouth’s order processing systems without human intervention, and thus involved an order mix quite different from one with just UNE-L orders. The bottom line is that BearingPoint never did volume testing of BellSouth’s physical hot cut process, nor for that matter was there any volume testing that focused exclusively on UNE-L orders. Third party testing provides no evidence of how BellSouth’s systems could be expected to perform with mass market volumes.

**Q. BELLSOUTH WITNESSES AINSWORTH AND HEARTLEY DISCUSS A FORCE MODEL THEY SAY PREDICTS THE NUMBER OF PERSONNEL THAT WOULD NEED TO BE ADDED TO HANDLE**

1       **ADDITIONAL VOLUMES OF HOT CUTS. DOES THIS MODEL**  
2       **ESTABLISH WHETHER BELL SOUTH CAN SEAMLESSLY PROCESS**  
3       **HIGH VOLUMES OF UNE-L ORDERS?**

4    A.   No. To the contrary, this testimony demonstrates how intensively manual  
5       BellSouth's processes are because BellSouth's only proposed way to address  
6       much higher volumes of hot cuts is to hire more people. The problem that  
7       BellSouth fails to acknowledge is that mass market volumes are of a different  
8       order of magnitude than BellSouth's manual processes currently encounter. From  
9       July 2002 to August 2003, CLECs submitted between 1 to 113 total UNE-L  
10      migration orders per month in Alabama, whereas they submitted between 8,159 to  
11      24,353 total UNE-P migration orders per month during the same period.  
12      (BellSouth responses to AT&T First Interrogatory Nos. 28 and 32.) Using a  
13      mathematical model to calculate the number of additional people that would be  
14      necessary in theory to handle such increased volumes fails to address the  
15      fundamental question of whether simply staffing up can address the problem. In  
16      the end, BellSouth just says "trust me." The Commission should not accept that  
17      paper promise since every hot cut that fails will directly impact an Alabama  
18      consumer.

19  
20       **Ability of BellSouth's Systems to Process All Types of UNE-L Orders**

21    Q.   **DOES BELL SOUTH ADDRESS ALL THE ORDERING SCENARIOS**  
22       **YOU ADDRESSED IN YOUR DIRECT TESTIMONY?**

1 A. No. BellSouth focuses on migrations from BellSouth to CLECs and ignores other  
2 kinds of transactions, such as CLEC-to-CLEC migrations.

3 **Q. PLEASE DESCRIBE WHAT IS INVOLVED IN MIGRATING A**  
4 **CUSTOMER FROM ONE CLEC TO ANOTHER.**

5 A. Of course, the loop needs to be moved from the losing CLEC's CFA to the  
6 winning CLEC's CFA, but that process will not provide the customer with the  
7 service that he has ordered. A CLEC-to-CLEC migration requires the losing  
8 CLEC to make the loop available to the winning CLEC for re-use, which requires  
9 providing the correct circuit ID and channel and pair assignment information to  
10 the winning CLEC. In addition, the losing CLEC must initiate the 10-digit LNP  
11 trigger in its switch and unlock the E911 database. While BellSouth is not  
12 directly involved in this process, the customer will not have the service he has  
13 requested until that process is complete. This Commission should not force  
14 CLECs to move to UNE-L until the CLEC-to-CLEC migration process is in place  
15 and tested, since the only "winner" in the chaos that will ensue if customers are  
16 "stranded" on one CLEC's platform will be BellSouth.

17 **Q. WHAT SHOULD BE DONE TO DEAL WITH THE REALITY THAT**  
18 **IMPAIRMENT ARISES NOT JUST FROM BELL SOUTH'S SYSTEMS,**  
19 **BUT FROM OTHER INDUSTRY PLAYERS AS WELL?**

20 A. As I discussed in my Direct Testimony, operational issues should be addressed in  
21 commission-sponsored industry workshops.

**Batch Hot Cut Process**

**Q. HAS BELL SOUTH DEVELOPED AN ADEQUATE BATCH HOT CUT PROCESS?**

A. No. BellSouth has developed a manually intensive batch ordering process that does not provide a seamless method for transitioning existing UNE-P customers to UNE-L. BellSouth's batch ordering process requires additional steps (a manual spreadsheet, negotiation for due dates and a new batch LSR) to the process. In addition, the process allows BellSouth to set due dates individually for each of the orders in the batch. These additional steps seem to be contrary to the FCC's recommendation that a batch process could simplify, streamline, and shorten the UNE-P to UNE-L migration process.

**Q. HAS BELL SOUTH STATED THAT IT WILL MAKE IMPROVEMENTS TO ITS PROCESS?**

A. Yes, BellSouth recently stated in its Florida surrebuttal testimony that it intends to make certain improvements. I will address BellSouth's proposal after discussing the problems with the existing process.

**Q. ARE THERE REASONS TO BE CONCERNED ABOUT THE EXISTING BATCH ORDERING PROCESS?**

A. Yes. The existing batch ordering process starts with the requirement that the CLEC provide its Account Manager with a manual spreadsheet listing the lines to be moved. The Account Manager has 4 business days to review the spreadsheet and assign due dates to each of the 99 separate accounts that can be listed. (For a carrier providing residential service, the 99 accounts will translate to 99 individual

1 customers.) The Account Manager then will return the spreadsheet to the CLEC.  
2 Unlike all other ILECs, BellSouth does not necessarily assign the same due date  
3 to each of the lines on the spreadsheet. BellSouth's apparently random date  
4 selection will not allow CLECs to plan for the transition of their customers and  
5 will create more work for all involved. Once the CLEC receives the spreadsheet  
6 with the listing of lines and proposed completion dates, the CLEC must create the  
7 batch ordering LSR – only then can the orders be submitted electronically to  
8 BellSouth's OSS. BellSouth's internal systems will "explode" a single batch LSR  
9 into multiple LSRs. This process did not exist and therefore was not tested during  
10 the 271 proceedings and BellSouth has not provided detailed documentation on  
11 how the process works, only the brief documentation available on the BellSouth  
12 CLEC web site. I am concerned that once CLECs begin to use this process, it will  
13 result in more orders falling to manual handling and more errors. At the very  
14 least, the batch ordering process adds steps to a process that should simplify the  
15 UNE-L ordering process. And because BellSouth's systems must issue multiple  
16 internal orders for each LSR, problems such as the premature disconnects, which  
17 were a problem with UNE-P until BellSouth removed its two order process,  
18 would likely recur.

19 **Q. HOW WOULD BELL SOUTH'S BATCH ORDERING PROCESS AFFECT**  
20 **CLECS?**

21 A. CLECs would need to develop new software to develop and send the batch LSR.  
22 Additional software may also be necessary to accept the notifiers issued for the  
23 individual LSRs created by the BellSouth internal systems, since the current

1 ordering processes for both UNE-P and UNE-L include a one-to-one correlation  
2 between orders issued and FOCs and other notifiers received. Thus, if a CLEC  
3 submitted a batch LSR via EDI, it would expect to receive an FOC for this  
4 submission, rather than FOCs for each of the orders included in the batch LSR.  
5 MCI believes that the process can be enhanced very easily by removing the  
6 requirement for a spreadsheet, a negotiation process, or the single "batch LSR."  
7 MCI would prefer a process that provides standard due dates and allows the  
8 issuance of individual LSRs, but BellSouth continues to refuse to collaborate with  
9 CLECs to develop a true batch hot cut process. BellSouth is the only ILEC that  
10 has not established collaboratives to develop a batch hot cut process, preferring  
11 instead to simply tell CLECs and this Commission that the existing process is  
12 "good enough."

13 **Q. IS BELL SOUTH'S BATCH ORDERING PROCESS EFFICIENT?**

14 A. No. The four business days BellSouth requires for initial negotiation is far too  
15 long; the entire process from start to finish should take five business days.  
16 CLECs should not be forced to perform additional steps. Due dates should be  
17 decided in advance using a scheduling tool such as the one that Verizon is  
18 discussing and that SBC is proposing. Communications between the ILEC and  
19 the CLEC should be electronic, using a system similar to the Verizon WPTS hot  
20 cut tool, the Status Tool recently proposed by Qwest, or the SBC-proposed PWS  
21 system. Adding these tools would greatly improve BellSouth's process.

22 **Q. HOW DOES THE BATCH ORDERING PROCESS ADDRESS LINE**  
23 **SPLIT LINES?**

1 A. My understanding is that when a customer is served by a UNE-P voice CLEC and  
2 a data CLEC over a line splitting configuration, and the customer is being  
3 migrated to a UNE-L loop, BellSouth will disconnect the CLEC line from the  
4 splitter and thus take down the customer's data service. The line would then be  
5 migrated to UNE-L. Theoretically, the CLEC could then order that the line  
6 splitting be re-installed, but BellSouth has yet to provide information on how this  
7 process will be accomplished, particularly if the CLEC is teaming with a data  
8 CLEC to provide line splitting via a second collocation arrangement (one for  
9 data). A process that does not allow the customer to retain his or her data  
10 provider when he moves to UNE-L is not acceptable and harms customers  
11 directly. This process must change so the customer's line splitting arrangement is  
12 not taken down.

13 **Q. WHAT PROCESS IMPROVEMENTS HAS BELL SOUTH STATED IT**  
14 **WILL MAKE?**

15 A. BellSouth has stated that it will include CLEC-to-CLEC migrations in its batch  
16 process; guarantee that all the lines of an end user's account will be cut on the  
17 same day; include after-hours and Saturday cuts; guarantee a four-hour window  
18 for coordinated hot cuts; include a timely restoral process if there is a problem  
19 with the cut; implement a web-based communication system for non-coordinated  
20 cuts; reduce the provisioning interval to 8 days; implement a scheduling tool; and  
21 include DS0 EELs in the batch process.

22 **Q. WILL THESE PROBLEMS ADDRESS ALL OF MCI'S CONCERNS?**

1 A. No. Although BellSouth's proposal appears to be a step in the right direction,  
2 there are a number of problems with it. As an initial matter, BellSouth has  
3 provided little detail with its proposal and it appears that much of the proposal  
4 would be implemented after the Commission's ruling in this proceeding, so  
5 neither the Commission nor the parties will be able to evaluate the effectiveness  
6 of the new process for purposes of this case. BellSouth does not state whether the  
7 due date negotiation process will continue to be required, whether CLECs will  
8 continue to be required to submit a spreadsheet listing its proposed migration  
9 orders as a prerequisite to negotiations with the project manager, and what  
10 systems will be used to update the "automated status tool." The limited level of  
11 detail BellSouth has provided does not allow this Commission or CLECs to  
12 determine whether it meets their needs.

13 **Q. MUST CHANGES BE MADE TO BELLSOUTH'S METRICS TO TAKE**  
14 **ACCOUNT OF ITS NEW BATCH PROCESS?**

15 A. Yes. Once the new process is developed and approved, metrics will need to be  
16 created to measure its effectiveness.

17  
18 **PriceWaterhouseCoopers Attestation**

19 **Q. MR. MCELROY DESCRIBES AN ATTESTATION BY**  
20 **PRICEWATERHOUSECOOPERS ("PwC") FOR BELLSOUTH. DO YOU**  
21 **HAVE ANY INITIAL CONCERNS ABOUT HOW THE TEST WAS**  
22 **DONE?**

1 A. Yes. The test was performed without participation by CLECs or a public service  
2 commission, which casts doubt on its objectivity, completeness and conclusions.  
3 Because BellSouth has provided only limited information about the test, it is  
4 impossible at this juncture for CLECs to evaluate fully the test methodology or  
5 results.

6 **Q. PLEASE COMMENT ON THE SCOPE OF THE ATTESTATION.**

7 A. Only the lift and lay process was tested. Although PwC states that it issued orders  
8 and reviewed the ordering process, there appears to be no data provided with  
9 respect to the ordering process. Aspects of UNE-L migration such as LNP,  
10 directory listings, trouble handling and 911 were not tested.

11 **Q. PLEASE COMMENT ON PWC'S METHODOLOGY.**

12 A. Without a test plan, it is difficult to know what PwC did or how it was done.  
13 Based on what is provided in Mr. McElroy's testimony, it appears that the test bed  
14 consisted of 750 lines that BellSouth wired to its frames in three central offices.  
15 These lines were translated in the BellSouth switches, but did not go to a CLEC  
16 collocation cage or switch. When the "migration order" was worked, the lines  
17 were re-terminated on the CLEC portion of the BellSouth main distributing  
18 frames and then run back to the switches. According to BellSouth, most of the  
19 orders were issued using BellSouth bulk ordering process.

20 **Q. PLEASE COMMENT ON THE EXCEPTIONS NOTED BY PWC.**

21 A. For 22 lines, no dial tone was detected prior to the cut, but the cuts were done  
22 anyway. If this problem existed for a live customer, and the trouble was on the  
23 loop, the customer would have continued to have problems after the cut. If

1 customer were suspended or had had dial tone removed for some reason, the  
2 CLEC would not have wanted the cut to proceed.

3 For 3 lines, there was no dial tone for longer than 20-40 minutes, with no  
4 explanation given. The result for a real customer would be the inability to make  
5 calls during this period.

6 Two lines were cut on the wrong due date (one early and one late). In the  
7 case of an early cut, the CLEC might not have completed translations, leaving the  
8 customer with no dial tone. Or the CLEC might not be ready to activate the LNP  
9 transaction, leaving the customer unable to receive calls. The customer would  
10 call for service, the CLEC would report to it to BellSouth as a UNE-P line, and  
11 BellSouth would show no record of the customer existing, which could take  
12 considerable time to resolve. A similar problem could occur if the cut were late.  
13 The CLEC would assume the order was rejected and would pull its translations  
14 from the switch and submit a new order to BellSouth. Indeed, a late cut is  
15 potentially more disruptive than an early cut.

16 One line was cut even though the telephone number was wrong. In such a  
17 case the wrong customer would have been migrated. The losing CLEC would  
18 receive a loss notice and stop billing the customer. The gaining CLEC would not  
19 bill the new customer since no order was placed for that migration. If the  
20 customer reported trouble to the losing CLEC, it would not be able to resolve it,  
21 since according to BellSouth, it would no longer own the customer. If trouble  
22 were reported to the new CLEC, it would turn the customer away, since the  
23 customer would not be in its database. BellSouth provides no explanation of why

1 this problem happened. It simply says it was "resolved" by working with the  
2 pseudo CLEC.

3 For six lines, CLEC dial tone was not tested prior to the cut. If CLEC dial  
4 tone had not been present, the customer would have been migrated with no dial  
5 tone.

6 For 47 (according to BellSouth) or 49 (according to PwC) lines, no  
7 cutover notification was given. In a non-coordinated cut (which MCI will use for  
8 residential customers), BellSouth notifies CLECs of the cut via a fax or email  
9 apparently generated by the EnDI system. Testing showed that this system failed  
10 on at least one day and presumably more, causing 47 (or 49) notifications to be  
11 "misplaced" and not sent. CLECs would have assumed that the customer was not  
12 cut over and thus would not have activated the LNP transaction. The customer  
13 would have been unable to receive calls. The CLEC would not be aware of the  
14 problem until the customer called to complain. The CLEC would then have to  
15 work with BellSouth to figure out what the problem was, a process that would  
16 take time and cause customer dissatisfaction.

17 **Q. IS THIS A SMALL NUMBER OF PROBLEMS?**

18 A. No. Out of the 724 orders observed, 81 problems were noted, or 11% of the total.  
19 Just based on the limited information made available to CLECs about the test,  
20 therefore, it is clear that BellSouth's batch hot cut process is flawed and that its  
21 use would result in significant harm to consumers.

22 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

23 A. Yes, it does.